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OFFICIAL YEAR BOOK OF THE COMMONWEALTH
OF AUSTRALIA.

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Australia

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA.

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1937

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OFFICIAL

YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA

No. 30.—1937.

Prepared under Instructions from
The Honorable the Treasurer,

BY

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BY AUTHORITY:

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PREFACE.

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered "to make laws for the peace, order, and good government of the Commonwealth, with respect to Census and Statistics." In the exercise of the power so conferred, a "Census and Statistics Act" was passed in 1905, and in the year following, the "Commonwealth Bureau of Census and Statistics" was created. The first Official Year Book was published early in 1908. The publication here presented is the thirtieth Official Year Book issued under the authority of the Commonwealth Government.

The synopsis on pp. vii to xxi immediately following shows the general arrangement of the work. The special index (following the usual general index) provided at the end of the volume, together with certain references given in the various Chapters, will assist in tracing in previous issues matter which, owing to limitations of space, has been omitted or is not printed fully in the present volume.

Economic and financial conditions during recent years have caused a demand for new information, or information expressed in new terms, concerning many matters of finance, trade, prices, production and population, and some progress has been made in the later volumes towards bringing closer to present day requirements the Chapters dealing with these branches of statistics while the Appendix furnishes a summary, brought up to the latest available date, of the chief events in connexion with the financial crisis.

In the present volume the most notable contributions of new material are a series of index-numbers showing (i) the movement of export prices (p. 526), (ii) the course of employment in factories (p. 590), and (iii) similar trends in retail stores (p. 591). On page 564 the recent basic wage judgment of the Commonwealth Court of Conciliation and Arbitration is reviewed and the main parts of the judgment are reprinted. The results of an extensive analysis of wheat holdings in 1935-36 are included in Chapter XX., and a summary of the recommendations of the Royal Commission appointed to inquire into the Monetary and Banking Systems in Australia is inserted in the Appendix.

All rates, etc., based on the mean population in the various chapters of this volume have been revised in accordance with the results of the Census of the 30th June, 1933.

Later information which has come to hand since the various Chapters were sent to press has been incorporated in the Appendix (p. 971).

The material contained in each issue is always carefully examined, but it would be idle to hope that all error has been avoided. I shall be grateful to those who will be kind enough to point out defects or make suggestions.

My best thanks are due to the State Statisticians, who have collected and compiled the data on which the greater part of the information given in the Year Book is based. Thanks are also due to the responsible officers of the various Commonwealth and State Departments, and to others, who have kindly, and often at considerable trouble, supplied information.

I wish to express my keen appreciation of the valuable work performed by Mr. J. Barry, the Editor of the Year Book, and of the services rendered by the officers in charge of the various branches of the Commonwealth Bureau of Census and Statistics, upon whom has devolved the duty of revising the Chapters relative to their respective branches.

ROLAND WILSON,
Commonwealth Statistician.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,

Canberra, December, 1937.

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STATISTICAL SUMMARY.

STATISTICAL SUMMARY, AUSTRALIA.

Year.

Heading.

		1881.	1891.	1901.	1911.	1921.	1931.	1936.
Population(a)	Males	1,247,059	1,736,617	2,004,836	2,382,232	2,799,462	3,332,577	3,446,198
	Females	1,059,677	1,504,368	1,820,077	2,191,554	2,711,532	3,220,029	3,360,554
Persons	No.	2,306,736	3,240,985	3,824,913	4,573,786	5,510,994	6,552,606	6,806,752
	Rate	80.004	110.187	102.945	122.193	136.198	118.509	116.073
Births	No.	35.26	34.47	27.16	27.21	24.95	18.11	17.13
	Rate	33.327	47.430	46.330	47.869	54.076	56.566	63.932
Deaths	No.	14.09	14.84	12.22	10.66	9.91	8.67	9.43
	Rate	17.244	23.862	27.753	39.482	46.869	38.882	58.709
Marriages	No.	7.60	7.47	7.32	8.79	8.59	5.90	8.66
	Rate							
		1881-82.	1891-92.	1901-02.	1911-12.	1921-22.	1931-32.	1935-36.
Agriculture—								
Wheat	Area, acs.	2,995,814	3,334,957	5,115,965	7,427,834	9,719,042	14,741,313	f) 12,342,000
	Yld., bshl.	21,443,862	25,675,205	38,561,619	71,636,317	129,088,800	190,612,150	f) 150,817,000
Oats	Area, acs.	7.16	7.70	7.54	9.64	13.28	12.93	f) 12.19
	Yld., bshl.	194,816	246,129	461,430	616,704	733,406	1,085,489	1,564,171
Barley	Area, acs.	4,795,897	5,726,256	9,789,851	9,561,833	12,447,433	15,194,080	18,720,774
	Yld., bshl.	24.62	23.27	21.22	15.50	16.56	14.00	11.97
Maize	Area, acs.	1,353,380	1,178,560	1,519,819	2,057,336	298,910	347,596	564,870
	Yld., bshl.	17.84	17.31	20.40	17.66	20.30	18.37	17.04
Hay	Area, acs.	165,777	284,428	294,819	340,065	305,186	269,448	297,616
	Yld., bshl.	5,726,266	9,261,022	7,034,780	8,937,835	7,840,438	7,062,385	7,407,705
Potatoes(h)	Area, acs.	34.54	32.56	23.86	26.29	25.69	20.21	25.09
	Yld., tons	768,388	942,166	1,688,402	2,518,351	2,994,510	2,634,680	3,007,470
Sugar Cane	Area, acs.	767,194	1,067,255	2,024,608	2,867,973	3,962,183	3,167,459	3,497,077
	Yld., tons	1.00	1.13	1.20	1.14	1.30	1.20	1.76
Vineyards	Area, acs.	76.265	112,884	109,685	130,463	149,144	145,111	124,089
	Yld., gal.	243,216	380,177	322,524	301,489	348,071	327,102	323,730
Pastoral production	Area, acs.	3.10	3.37	2.94	2.31	2.00	2.74	2.59
	Yld., tons	19,708	45,444	86,950	101,010	128,356	241,576	238,931
Live Stock	Area, acs.	340,627	737,573	1,367,802	1,682,250	2,437,800	4,213,453	4,500,007
	Yld., gal.	17.74	16.23	15.73	18.08	17.44	17.44	18.84
Pastoral production	Area, acs.	14,569	43,882	63,077	60,602	92,414	112,961	118,079
	Yld., gal.	1,438,060	3,437,598	5,262,447	4,975,147	8,542,573	14,190,522	17,727,958
Total gross value of all agricultural production		£ 15,519,000	16,988,000	23,835,000	38,774,000	81,590,000	74,489,000	75,388,000
Pastoral, dairying, etc.—	Sheep No.	65,092,719	106,421,068	72,040,211	96,886,234	86,110,008	110,618,803	f) 112,212,000
	Cattle	8,010,991	11,112,112	8,491,428	11,828,954	14,441,300	12,209,955	13,852,954
Live Stock	Horses	1,088,020	1,584,737	1,020,420	2,278,220	2,338,182	1,775,550	1,753,784
	Pigs	703,188	845,888	931,300	1,110,721	900,385	1,107,815	1,213,004
Wool prod. lb. (greasy)	Area, acs.	319,649,000	634,049,000	530,395,000	708,341,000	723,050,000	1,007,455,000	f) 1,071,735,000
	Yld., lb.	(d) 42,314,585	104,747,205	212,073,715	207,074,340	390,054,070	380,415,500	380,415,500
Butter production	Area, acs.	(d) 10,130,945	11,845,153	15,880,712	32,053,003	31,422,073	37,808,710	37,808,710
	Yld., lb.	(d) 16,771,886	34,020,620	53,335,092	58,020,409	71,121,740	77,655,178	77,655,178
Total gross value of pastoral and dairying production		£ 29,538,000	39,256,000	36,890,000	72,883,000	119,399,000	103,018,000	138,819,000
		1881.	1891.	1901.	1911.	1921.	1931.	1936.
Mineral production—								
Gold	£	5,194,300	5,281,861	14,017,538	10,551,624	4,018,685	3,563,510	10,182,738
	£	15,622	3,730,152	2,248,908	3,022,177	1,530,992	1,441,897	4,917,000
Silver and lead	£	714,003	367,373	2,215,431	2,504,278	803,957	507,285	790,686
	£	1,145,880	500,502	448,231	1,200,073	418,418	210,205	658,807
Tin	£	200	2,979	4,067	1,115,190	283,455	512,793	934,921
	£	637,865	1,912,353	2,602,733	3,927,300	11,014,831	6,355,246	6,987,129
Zinc	£							
	£							
Coal	£							
	£							
Total value of all mineral production		£ 7,820,290	12,074,106	21,816,772	23,302,878	20,020,107	13,352,316	27,562,063
Forestry production—								
Quantity of local timber	£							
	£							
sawn or hewn	£							
	£							
1,000 sup. ft.		(d)	(d)	452,131	604,794	590,495	236,707	563,200

(a) At 31st December.

(b) Partly estimated for 1881.

(c) Area of productive cane.

(d) Information

(f) 1936-37 figures.

(e) Years ended December, except for last two columns which refer to years ended June.

STATISTICAL SUMMARY, AUSTRALIA—continued.

Heading.		Year.						
		1881.	1891.	1901.	1911.	1921-22.	1931-32.	1935-36.
Manufactories—								
No. of factories	No.				14,455	18,023	21,657	24,894
Hands employed	No.				311,710	378,540	336,658	402,771
Wages paid	£	(a)	(a)	(a)	27,588,377	68,050,801	55,931,818	82,000,288
Value of production	£				51,250,004	131,074,119	110,981,830	100,377,373
Total value of output	£				133,022,090	320,340,705	281,645,785	314,008,155
Shipping—								
Oversea vessels	No.	3,284	3,778	4,028	4,174	3,111	3,057	3,297
ent. & cleared	tons	2,549,394	4,726,307	5,541,991	9,084,801	9,081,278	11,395,784	12,011,771
Commerce—								
Imports, oversea	£	29,067,000	37,711,000	42,434,000	66,957,488	103,066,436	44,712,858	62,010,143
per head	£	1.1642	1.1716/0	1.1731/1	1.418/2	1.814/1	6/10/6	1.112/4
Exports, oversea	£	27,528,000	36,011,000	49,000,000	79,432,258	127,846,535	85,318,607	128,143,140
per head	£	1.2028	1.1806	1.4262	1.713/10	2.374/1	13/0/5	1.870/1
Total oversea trade	£	56,595,000	73,722,000	92,134,000	146,449,746	230,912,971	130,001,175	220,788,573
per head	£	2.4132/10	2.311/6	2.401/1	3.212/0	4.118/2	19/16/11	3.285/11
Customs and Excise duties								
per head	£	4,809,326	7,440,866	8,656,530	13,515,005	27,565,199	28,521,996	41,191,753
Principal Oversea Exports (c) —		2/2/2	2/6/7	2/5/8	2/19/2	5/0/1	4/7/1	6/0/11
Govt. Railways—								
Lgh. of line open, mls.		3,832	9,541	12,579	16,078	23,502	26,959	27,089
Capital cost	£	42,741,350	99,764,000	123,223,779	152,791,603	244,353,233	323,365,450	337,040,014
Gross revenue	£	3,910,122	8,654,075	11,038,468	17,847,877	38,194,630	37,579,905	41,302,000
Working expenses	£	2,141,735	5,630,182	7,133,617	10,945,727	29,817,970	28,141,984	29,768,000
Per cent. of working expenses on earnings %		54.77	65.06	64.63	61.33	78.07	74.88	72.07
Postal—								
Letters and postcards dealt with	No.	67,640,000	157,297,000	220,853,000	453,063,000	561,973,105	713,134,500	835,087,600
per head	No.	29.61	49.07	58.26	100.90	102.01	111.02	123.70
Newspapers dealt with	No.	38,063,000	85,280,000	102,727,000	141,638,000	140,477,184	139,502,100	151,271,800
per head	No.	16.66	26.61	27.10	31.54	25.50	21.30	22.11
Cheque-paying Banks—								
Note circulation	£	3,978,711	4,417,269	3,399,462	3,718,458	213,868	197,121	167,360
Coin & bullion held	£	9,108,243	16,712,923	19,780,528	33,170,770	21,626,832	2,882,026	3,370,102
Advances	£	57,732,824	129,741,583	86,352,832	108,578,774	19,343,570	260,917,515	291,773,000
Deposits	£	53,849,455	98,345,338	91,487,148	143,446,910	273,800,737	319,241,333	471,200,880
Savings Banks (j)—								
Total deposits	£	7,854,480	15,536,592	30,882,645	59,393,682	154,396,051	197,966,308	230,807,000
Aver. per head of population	£	3/10/5	4/18/7	8/3/0	13/8/5	28/0/4	30/1/11	33/10/2
State Schools—								
Number of Schools	No.	4,494	6,231	7,012	8,060	9,445	10,097	10,301
Teachers	No.	9,028	12,564	14,509	16,071	26,120	33,762	33,003
Enrolment	No.	432,320	561,153	638,478	618,850	814,042	936,001	913,333
Aver. attendance	No.	255,143	350,773	450,240	463,799	666,498	817,262	780,877

(a) Owing to variation in classification and lack of information, effective comparison is impossible.
 (b) British currency values. The recorded values were—Exports 1931-32, £108,404,118; and 1930-31, £116,471,847.
 (c) Australian produce, except gold, which includes re-exports. (d) Includes packets.
 (e) Figures for the first three years are averages for the December quarter; the remainder for the June quarter.
 (f) 1936-37 figures. (g) Decrease due to prohibition of re-issue. (h) Includes Commonwealth Savings Bank Deposits. (i) Government "Set-off" accounts, Interstate (Commonwealth Bank) excluded. (j) First three years at 31st December, remainder, 30th June.

CHRONOLOGICAL TABLE.

CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE THE ESTABLISHMENT OF SETTLEMENT IN AUSTRALIA.

NOTE.—The Government was centralized in Sydney, New South Wales, up to 1825, when Tasmania (Van Diemen's Land) was made a separate colony. In the Table, the names now borne by the States serve to indicate the localities.

Year.

- 1788 N.S.W.—Arrival of "First Fleet" at Botany Bay. Land in vicinity being found unsuitable for settlement, the expedition moved to Sydney Cove. Formal proclamation of colony on 7th February. Branch Settlement established at Norfolk Island. French navigator Lapérouse visited Botany Bay. First cultivation of wheat and barley. First grape vines planted.
- 1789 N.S.W.—First wheat harvest at Parramatta, near Sydney. Discovery of Hawkesbury River.
- 1790 N.S.W.—"Second Fleet" reached Port Jackson. Landing of the New South Wales Corps.
- 1791 N.S.W.—Arrival of "Third Fleet." Territorial seal brought by Governor King.
- 1792 N.S.W.—Visit of *Philadelphia*, first foreign trading vessel.
- 1793 N.S.W.—First free immigrants arrived in the *Bellona*. First Australian church opened at Sydney. Tas.—D'Entrecasteaux discovered the Derwent River.
- 1794 N.S.W.—Establishment of settlement at Hawkesbury River.
- 1795 N.S.W.—Erection of the first printing press at Sydney. Descendants of strayed cattle discovered at Cowpastures, Nepean River.
- 1796 N.S.W.—First Australian theatre opened at Sydney. Coal discovered by fishermen at Newcastle.
- 1797 N.S.W.—Introduction of merino sheep from Cape of Good Hope.
- 1798 Tas.—Insularity of Tasmania proved by voyage of Bass and Flinders.
- 1800 N.S.W.—Hunter River coal mines worked. First Customs House in Australia established at Sydney. Flinders' charts published.
- 1801 N.S.W.—First colonial manufacture of blankets and linen.
- 1802 Vic.—Discovery of Port Phillip by Lieut. Murray. Q'land.—Discovery of Port Curtis and Port Bowen by Flinders. S.A.—Discovery of Spencer's and St. Vincent Gulfs by Flinders.
- 1803 N.S.W.—First Australian wool taken to England by Capt. Macarthur. Issue of "The Sydney Gazette," first Australian newspaper. Vic.—Attempted settlement at Port Phillip by Collins. Discovery of Yarra by Grimes. Tas.—First settlement formed at Risdon by Lieut. Bowen.
- 1804 N.S.W.—Insurrection of convicts at Castle Hill. Vic.—Abandonment of settlement at Port Phillip. Tas.—Foundation of settlement at Hobart by Collins, and at Yorktown by Colonel Paterson.
- 1805 N.S.W.—First extensive sheep farm established at Camden by Capt. Macarthur. Portion of settlers from Norfolk Island transferred to Tasmania.
- 1806 N.S.W.—Shortage of provisions. Tas.—Settlement at Launceston.
- 1807 N.S.W.—Final transfer of convicts from Norfolk Island. First shipment of merchantable wool (245 lb.) to England.
- 1808 N.S.W.—Deposition of Governor Bligh.
- 1809 N.S.W.—Isaac Nichols appointed to supervise delivery of overseas letters.
- 1810 N.S.W.—Post-office officially established at Sydney. Isaac Nichols first postmaster. First race meeting in Australia at Hyde Park, Sydney. Tas.—First Tasmanian newspaper printed.
- 1813 N.S.W.—Passage across Blue Mountains discovered by Wentworth, Lawson and Blaxland. Macquarie River discovered by Evans.
- 1814 N.S.W.—Flinders suggested the name "Australia," instead of "New Holland." Creation of Civil Courts.
- 1815 N.S.W.—First steam engine in Australia erected at Sydney. Lachlan River discovered by Evans. Tas.—Arrival of first immigrant ship with free settlers. First export of wheat to Sydney.

Year.

- 1816 N.S.W.—Botanic Garden formed at Sydney.
- 1817 N.S.W.—Oxley's first exploration inland. Discovery of Lakes George and Bathurst and the Goulburn Plains by Meehan and Hume. First bank in Australia—Bank of New South Wales—opened at Sydney.
- 1818 N.S.W.—Liverpool Plains, and the Peel, Hastings and Manning Rivers discovered by Oxley, and Port Essington by Captain King.
- 1819 N.S.W.—First Savings Bank in Australia opened at Sydney.
- 1820 Tas.—First importation of pure merino sheep.
- 1821 Tas.—Establishment of penal settlement at Macquarie Harbour.
- 1823 N.S.W.—New South Wales Judicature Act passed. Discovery of gold at Fish River by Assistant-Surveyor McBrien. Qld.—Brisbane River discovered by Oxley.
- 1824 N.S.W.—Constituted a Crown Colony. Executive Council formed. Establishment of Supreme Court at Sydney, and introduction of trial by jury. First Australian Enactment (Currency Bill) passed by the Legislative Council. Proclamation of freedom of the press. First manufacture of sugar. Vic.—Hume and Hovell, journeying overland from Sydney, arrived at Corio Bay. Qld.—Penal settlement founded at Moreton Bay (Brisbane). Fort Dundas Settlement formed at Melville Island, N. Terr.
- 1825 N.S.W.—Extension of western boundary to 129th meridian. Tas.—Separation of Van Diemen's Land (Tasmania). Qld.—Major Lockyer explored Brisbane River to its source, and discovered coal.
- 1826 N.S.W.—Settlement in Illawarra District. Vic.—Settlement at Corinella, Western Port, formed by Captain Wright.
- 1827 N.S.W.—Colony became self-supporting. Qld.—Darling Downs and the Condamine River discovered by Allan Cunningham. W.A.—Military Settlement founded at King George's Sound by Major Lockyer. First official claim of British Sovereignty over all Australia.
- 1828 N.S.W.—Second constitution. First Census. Sturt's expedition down Darling River. Gas first used at Sydney. Richmond and Clarence Rivers discovered by Captain Rous. Vic.—Abandonment of settlement at Western Port. Qld.—Cunningham discovered a route from Brisbane to the Darling Downs, and explored Brisbane River.
- 1829 N.S.W.—Sturt's expedition down Murrumbidgee River. W.A.—Foundation of settlement at Swan River. Foundation of Perth.
- 1830 N.S.W.—Insurrection of convicts at Bathurst. Sturt, voyaging down Murrumbidgee and Murray Rivers, arrived at Lake Alexandrina. Tas.—Trouble with natives. Black line organized to force aborigines into Tasman's Peninsula, but failed. Between 1830 and 1835, however, George Robinson, by friendly suasion, succeeded in gathering the small remnant of aborigines (203) into settlement on Flinders Island.
- 1831 N.S.W.—Crown lands first disposed of by public competition. Mitchell's explorations north of Liverpool Plains. Arrival at Sydney of first steamer, *Sophia Jane*, from England. SS. *Surprise*, first steamship built in Australia, launched at Sydney. First coal shipped from Australian Agricultural Company's workings at Newcastle, N.S.W. First assisted immigration to N.S.W. S.A.—Wakefield's first colonization committee. W.A.—Appointment of Executive and Legislative Councils.
- 1832 N.S.W.—State Savings Bank established.
- 1833 N.S.W.—First School of Arts established at Sydney.
- 1834 N.S.W.—First settlement at Twofold Bay. Vic.—Settlement formed at Portland Bay by Henty Bros. S.A.—Formation of the South Australian Association. W.A.—Severe reprisals against natives at Pinjarrah.
- 1835 Vic.—John Batman arrived at Port Phillip; made treaty with the natives for 600,000 acres of land; claim afterwards disallowed by Imperial Government. Foundation of Melbourne.

Year.

- 1836 N.S.W.—Mitchell's overland journey from Sydney to Cape Northumberland. Vic.—Proclamation of Port Phillip district as open for settlement. S.A.—Settlement founded at Adelaide under Governor Hindmarsh.
- 1837 N.S.W.—Appointment in London of Select Committee on Transportation. Vic.—Melbourne named by Governor Bourke. First overlanders from Sydney arrived at Port Phillip.
- 1838 N.S.W.—Discontinuance of assignment of convicts. Qld.—Settlement of German missionaries at Brisbane. S.A.—“Overlanding” of cattle from Sydney to Adelaide along the Murray route by Hawden and Bonney. Settlement at Port Essington, Northern Territory, formed by Captain Bremer.
- 1839 N.S.W.—Gold found at Vale of Clwydd by Count Strzelecki. S.A.—Lake Torrens discovered by Eyre. Port Darwin discovered by Captain Stokes. W.A.—Murchison River discovered by Captain Grey.
- 1840 N.S.W.—Abolition of transportation to New South Wales. Land regulations—proceeds of sales to be applied to payment for public works and expenditure on immigration. Vic.—Determination of northern boundary. Qld.—Penal settlement broken up and Moreton Bay district thrown open. S.A.—Eyre began his overland journey from Adelaide to King George's Sound.
- 1841 N.S.W.—Gold found near Hartley by Rev. W. B. Clarke. W.A.—Completion of Eyre's overland journey from Adelaide to King George's Sound. Tas.—Renewal of transportation.
- 1842 N.S.W.—Incorporation of Sydney. Vic.—Incorporation of Melbourne. S.A.—Discovery of copper at Kapunda.
- 1843 N.S.W.—First Representative Constitution (under Act of 1842). First manufacture of tweed. Qld.—Moreton Bay granted legislative representation.
- 1844 Qld.—Leichhardt's expedition to Port Essington. S.A.—Sturt's last expedition inland.
- 1845 N.S.W.—Mitchell's explorations on the Barcoo. Qld.—Explorations by Mitchell and Kennedy. S.A.—Discovery of the Burra copper deposits. Sturt discovered Cooper's Creek.
- 1846 N.S.W.—Initiation of meat preserving. Qld.—Foundation of settlement at Port Curtis. S.A.—Proclamation of North Australia. W.A.—Foundation of New Norcia (Benedictine) Mission.
- 1847 N.S.W.—Iron smelting commenced near Berrima. Overland mail established between Sydney and Adelaide. Vic.—Melbourne created a City. Qld.—Explorations by Leichhardt, Burnett and Kennedy.
- 1848 Qld.—Leichhardt's last journey. Kennedy speared by the blacks at York Peninsula. Chinese brought in as shepherds.
- 1849 N.S.W.—Indignation of colonists at arrival of convict ship *Hashemy*. Exodus of population to goldfields of California. Vic.—*Randolph* prevented from landing convicts. Qld.—Assignment of convicts per *Hashemy* to squatters on Darling Downs. W.A.—Commencement of transportation to Western Australia.
- 1850 N.S.W.—Final abolition of transportation. First sod of first Australian railway turned at Sydney. Sydney University founded. Vic.—Gold discovered at Clunes by Hon. W. Campbell. Representative government granted. S.A.—Representative government granted. W.A.—Pearl oysters found by Lieut. Helpman at Saturday Island Shoal. Tas.—Representative government granted.
- 1851 N.S.W.—Payable gold discovered by Hargraves at Lewis Ponds and Summerhill Creek. Telegraph first used. Vic.—Separation of Port Phillip—erected into independent colony under the name of Victoria. Discovery of gold in various localities. “Black Thursday,” 6th Feb., a day of intense heat. W.A.—Proclamation of Legislative Council Act.

- Year.
- 1852 N.S.W.—Arrival of the *Chusan*, first P. and O. mail steamer from England. S.A.—First steamer ascended the Murray River to the junction with the Darling. Tas.—Meeting of first elective, Council protests against transportation. Payable gold discovered at The Nook, near Fingal, and at Nine Mile Springs.
- 1853 Tas.—Abolition of transportation. Vic.—Melbourne University founded.
- 1854 Vic.—Opening of first Victorian railway—Flinders-street to Port Melbourne. Riots on Ballarat gold-fields. Storming of the Eureka Stockade, 3rd Dec.
- 1855 N.S.W.—Opening of railway—Sydney to Parramatta. Mint opened.
- 1856 N.S.W.—Pitcairn Islanders placed on Norfolk Island. W.A.—A. C. Gregory's expedition in search of Leichhardt.
- Responsible Government in N.S.W., Vic., S.A. and Tas. (Act of 1855).
- 1857 N.S.W.—Wreck of the *Dunbar* (110 lives lost), and *Catherine Adamson* (21 lives lost), at Sydney Heads. Select Committee on Federation. Vic.—Manhood suffrage and vote by ballot. S.A.—Passage of Torrens' Real Property Act.
- 1858 N.S.W.—Establishment of manhood suffrage and vote by ballot. Telegraphic communication between Sydney, Melbourne and Adelaide. Qld.—Canoona gold rush.
- 1859 Qld.—Proclamation of Queensland as separate colony. Tas.—First submarine cable, via Circular Head and King Island to Cape Otway.
- 1860 Vic.—Burke and Wills left Melbourne and crossed to Gulf of Carpentaria. S.A.—Copper discoveries at Wallaroo and Moonta. McDouall Stuart reached centre of continent and named "Central Mount Stuart."
- 1861 N.S.W.—Anti-Chinese riots at Lambing Flat and Burrangong gold-fields. Opening of first tramway in Sydney. Regulation of Chinese immigration. Vic.—Burke and Wills perished at Cooper's Creek, near Innamincka, S.A.
- 1862 N.S.W.—Abolition of State aid to religion. Real Property Act. S.A.—Stuart crossed the Continent from south to north. W.A.—First export of pearl-shell.
- 1863 Vic.—Intercolonial Conference at Melbourne. S.A.—Northern Territory taken over. W.A.—Initiation of settlement in the North-west district. Henry Maxwell Lefroy discovered and traversed area now comprised in the Coolgardie-Kalgoorlie gold-field.
- 1864 Qld.—First railway begun and opened. First sugar made from Queensland cane. Tas.—First successful shipment of English salmon ova.
- 1865 N.S.W.—Destruction by fire of St. Mary's Cathedral, Sydney.
- 1866 N.S.W.—Passage of Public Schools Act of (Sir) Henry Parkes. S.A.—Introduction of camels for exploration, etc.
- 1867 Vic.—Imposition of protective tariff. Qld.—Discovery of gold at Gympie.
- 1868 N.S.W.—Attempted assassination of the Duke of Edinburgh at Clontarf, near Sydney. W.A.—Arrival of the *Hougoumont*, last convict ship. Tas.—First sod of first railway (Launceston and Western) turned by Duke of Edinburgh.
- 1869 W.A.—First telegraph line opened from Perth to Fremantle.
- 1870 N.S.W.—Intercolonial Exhibition opened at Sydney. Imperial troops withdrawn. Vic.—Intercolonial Congress at Melbourne. S.A.—Commencement of trans-continental telegraph.
- 1871 N.S.W.—Permanent military force raised. W.A.—Passage of Elementary Education Act. Forrest's explorations. Tas.—Discovery of tin at Mount Bischoff. Launceston-Western railway opened for traffic.
- 1872 N.S.W.—International Exhibition at Sydney. Vic.—Mint opened. S.A.—Cable from Java to Port Darwin. Completion of transcontinental telegraph line.
- 1873 N.S.W.—Intercolonial Conference at Sydney. First volunteer encampment. Inauguration of mail service with San Francisco.
- 1874 N.S.W.—Triennial Parliaments Act passed. Intercolonial Conference. W.A.—John and Alexander Forrest arrived at Overland Telegraph from Murchison. S.A.—University of Adelaide founded.

Year.

- 1875 Qld.—Transfer of Port Albany Settlement to Thursday Island.
- 1876 N.S.W.—Completion of cable—Sydney (La Perouse) to Wellington (Wakapuaka).
W.A.—Giles crossed colony from east to west. Tas.—Death of Truganini,
last representative of Tasmanian aborigines.
- 1877 W.A.—Opening of telegraphic communication with South Australia.
- 1878 Qld.—Restriction of Chinese immigration.
Introduction of telephone into Australia.
- 1879 N.S.W.—First artesian bore at Killara. International Exhibition at Garden
Palace, Sydney. First steam tramway. W.A.—A. Forrest's explorations
in the Kimberley district, and discovery of the Fitzroy pastoral country.
- 1880 N.S.W.—Public Instruction Act passed. Vic.—Opening of first Victorian Inter-
national Exhibition at Melbourne. First Australian Telephone Exchange
opened in Melbourne.
Federal Conference at Melbourne and Sydney.
- 1881 N.S.W.—Further restrictions on Chinese immigration.
Visit to Australia of T.R.H. Prince Albert Victor and Prince George.
- 1882 W.A.—Nugget of gold found between Roebourne and Cossack.
- 1883 N.S.W.—Discovery of silver at Broken Hill. Completion of railway between
New South Wales and Victoria. Qld.—Annexation of New Guinea—
repudiated by Imperial authorities.
Federal Conference held at Sydney. Federal Council created.
- 1884 Federation Bill passed in Victoria and rejected in New South Wales. British
protectorate declared over New Guinea.
- 1885 N.S.W.—Military contingent sent to the Sudan. Opening of the Broken Hill
Proprietary Silver Mines. W.A.—Gold found by prospectors on the Margaret
and Ord Rivers in the Kimberley district. Tas.—Silver-lead discovered at
Mount Zeehan.
- 1886 Tas.—Discovery of gold and copper at Mount Lyell.
First session of Federal Council met at Hobart on the 26th January.
- 1887 N.S.W.—Disaster at Bulli coal mine (31 lives lost). S.A.—International Exhibition
at Adelaide. W.A.—Cyclone destroyed nearly the whole pearling fleet off the
Ninety-Mile Beach—200 lives lost. Gold discovered at Southern Cross.
First "Colonial" Conference in London. Australasian Naval Defence
Force Act passed.
- 1888 N.S.W.—Centennial celebrations. Restrictive legislation against Chinese,
imposing poll-tax of £100. Vic.—Second Victorian International Exhibition
held at Melbourne. Qld.—Railway communication opened between Sydney
and Brisbane.
Conference of Australian Ministers at Sydney to consider question of
Chinese immigration. First meeting of the Australasian Association for the
Advancement of Science held in Sydney.
- 1889 Qld.—Direct railway communication established between Brisbane and Adelaide.
W.A.—Framing of new Constitution. Tas.—University of Tasmania founded.
- 1890 W.A.—Responsible Government granted.
Meeting at Melbourne of Australasian Federation Conference.
- 1891 N.S.W.—Election to Legislative Assembly of 35 Labour members. Arrival of
Australian Auxiliary Squadron. Cessation of assisted immigration. W.A.—
Discovery of gold on the Murchison.
First Federal Convention in Sydney: draft bill framed and adopted.
- 1892 W.A.—Discovery of gold by Messrs. Bayley and Ford at Coolgardie.
- 1893 N.S.W.—Departure by the *Royal Tar* of colonists for "New Australia."
Financial crisis, chiefly affecting the eastern States.

Year.

- 1895 N.S.W.—Free-trade tariff. Land and income taxes introduced.
Conference of Premiers on Federation at Hobart.
- 1896 N.S.W.—People's Federal Convention at Bathurst.
- 1897-8 Sessions of Federal Convention at Adelaide, Sydney and Melbourne.
- 1898 N.S.W.—First surplus of wheat for export.
Draft Federal Constitution Bill submitted to electors in Victoria, New South Wales, South Australia and Tasmania. Requisite statutory number of votes not obtained in New South Wales.
- 1899 First contingent of Australian troops sent to South Africa. Conference of Premiers in Melbourne to consider amendments to Federal Constitution Bill. Referendum—Bill accepted by New South Wales, Victoria, Queensland, South Australia and Tasmania. First Labour Government (Queensland).
- 1900 N.S.W.—Old-age pensions instituted.
Contingents of naval troops sent to China. Commonwealth Constitution Act received Royal Assent, 9th July. Proclamation of Commonwealth signed, 17th September. Mr. (afterwards Sir) Edmund Barton formed first Federal Ministry.
- 1901 Vic.—Old-age pensions instituted.
Proclamation of the Commonwealth at Sydney. First Federal Parliament opened at Melbourne by the Duke of Cornwall and York. Interstate free-trade established.
- 1902 N.S.W.—Disastrous explosion at Mount Kembla Colliery—95 lives lost. W.A.—Opening of pumping station at Northam in connexion with Gold-fields water supply. Completion of Pacific Cable (all-British). First Federal Tariff.
- 1903 W.A.—Coolgardie and Kalgoorlie Water Supply Scheme completed.
Inauguration of the Federal High Court.
- 1905 N.S.W.—Re-introduction of assisted immigration.
- 1906 Wireless telegraphy installed between Queenscliff, Vic., and Devonport, Tas. Papua taken over by Commonwealth.
- 1907 N.S.W.—Telephone, Sydney to Melbourne, opened. First telephone trunk line service between Capital Cities, i.e., Sydney and Melbourne.
Imperial Conference in London.
- 1908 Canberra chosen as site of Federal Capital. Visit of U.S.A. fleet to Australia.
- 1909 Imperial Defence Conference in London—Commonwealth ordered two destroyers and one first-class cruiser for fleet unit. Visit of Lord Kitchener to report and advise on Commonwealth military defence. Queensland University founded.
- 1910 Referendum on financial relations between the Commonwealth and the States. Penny Postage. Arrival of the *Yarra* and *Parramatta*, first vessels built for the Royal Australian Navy. Australian Notes Act passed and first Commonwealth notes issued. Admiral Sir R. Henderson visited Australia to advise on naval defence.
- 1911 First Federal Census. Transfer of Federal Capital Territory and Northern Territory to Commonwealth. Introduction of compulsory military training. Establishment of penny postage to all parts of British Empire. University of Western Australia founded.
- 1912 Opening of Commonwealth Bank. First payments of Maternity Bonus. First sod turned at Port Augusta of Trans-Australian Railway (Port Augusta to Kalgoorlie).
- 1913 Federal Capital named Canberra and foundation stone laid. Appointment of Interstate Commission.

Year.

- 1914 Visit of General Sir Ian Hamilton to report on military defence scheme. Double dissolution of Federal Parliament. Visit of British Association for the Advancement of Science. Transfer of Norfolk Island to Commonwealth.
European War declared 4th August. Australian Navy transferred to British Navy. Australian offer to equip and furnish 20,000 troops accepted. German possessions in South-West Pacific seized by Australian Naval and Military Expeditionary Force. German cruiser *Emden* destroyed by H.M.A.S. *Sydney* at Cocos Islands, 9th November. First contingent landed in Egypt. Australian and New Zealand Army Corps (A.N.Z.A.C.) formed under Sir William Birdwood.
- 1915 Opening of Broken Hill Proprietary's Ironworks at Newcastle, N.S.W. Navy Department created.
Australian and New Zealand troops landed at Gallipoli, 25th April. Battle of Sari Bair (Lone Pine), 6th-10th August. Evacuation, 18th-20th December. Australian warships with Grand Fleet, in Atlantic, Malaysia, and elsewhere overseas during remainder of war.
- 1916 Purchase of steamships by the Commonwealth.
Australian and New Zealand mounted troops organized in mounted divisions and camel corps, operating thereafter in Egypt, Palestine and Syria. Battle of Romani, 4th August. Other troops with reinforcements organized as four infantry divisions (1st, 2nd, 4th and 5th) with some other units, and transferred to France. Fromelles, 19th July; the Somme, 1st July-18th November (Pozières, Mouquet Farm, Flers). 3rd Division, formed in Australia, landed in France. First proposal for compulsory military service defeated by referendum.
- 1917 National Ministry formed. Kalgoorlie-Port Augusta railway completed.
German withdrawal from Somme; Arras offensive (Bullecourt, 11th April and 3rd May); Messines, 7th June; Third Battle of Ypres, 1st July-10th November (Menin Road, Polygon Wood, Broodseinde, Passchendaele). Palestine—Gaza, 26th March. 19th April, 31st October (Beersheba). Australian Flying Corps operating with R.F.C. in Palestine and France. Second proposal for compulsory military service defeated by referendum.
- 1918 Population of Australia reached 5,000,000. Australia House (Strand, London) opened by the King.
Five Australian divisions in France formed into army corps, 1st January. Sir William Birdwood succeeded by Sir John Monash, 30th May. Defensive campaign on Somme, 21st March-25th April (Dernancourt, Villers-Bretonneux); Battles of the Lys, 9th-29th April (Hazebrouck); Hamel, 4th July; Battle of Amiens, 8th August; Mont St. Quentin, 31st August; Hindenburg Line, 18th September-5th October. Palestine—Megiddo, 19th September; Damascus, 1st October. Armistice with Germany, 11th November. Repatriation Department created.
- 1919 Mr. Hughes and Mr. Cook represented Australia at Peace Conference. Return of Australian troops. Aerial flight England to Australia by Capt. Sir Ross Smith and Lieut. Sir Keith Smith. Peace Treaty signed at Versailles, 28th June.
- 1920 Visit to Australia of H.R.H. the Prince of Wales. Wholesale prices reached a point more than double the 1914 level.
- 1921 Second Commonwealth Census. Germany's indemnity fixed (Australia's share approximately £63,000,000). Mandate given to Australia over Territory of New Guinea. First direct wireless press message, England to Australia.
- 1922 First lock on River Murray opened at Blanchetown, South Australia. Queensland Legislative Council abolished.
- 1923 First sod turned on the site of Federal Parliament House at Canberra.
- 1924 Visit of British cruiser squadron. Directorate of Commonwealth Bank appointed. Australian Loan Council formed.

Year.

- 1925 Visit of American fleet. Solar Observatory established at Canberra. Brisbane-Grafton railway joining Sydney and Brisbane by uniform gauge was commenced. Sydney Harbour Bridge commenced.
- 1926 Population of Australia reached 6,000,000. Council for Scientific and Industrial Research established. Imperial Conference. Dominion Status defined.
- 1927 Transfer of Seat of Federal Government from Melbourne to Canberra. New Parliament House opened by H.R.H. the Duke of York. Beam Wireless established.
- 1928 Visit of British Economic Mission to report on the development of Australian resources. Financial agreement of Commonwealth and States; Loan Council reconstituted; State debts to be taken over; Referendum carried, November.
- 1929 Beginning of fall in export prices. Commonwealth Bank empowered to mobilize gold reserves. Substantial export of gold reserves towards end of year.
- 1930 Wireless phone service with other countries inaugurated. Export prices fell to half 1928 level. Cessation of overseas loans. Tariff embargoes and rationing of imports. Visit of Sir Otto Niemeyer, of Bank of England, to discuss financial questions. Heavy export of gold reserves. Exchange Pool formed. £28,000,000 Conversion Loan fully subscribed. Gold bonus granted. Government deficits total nearly £11,000,000. First Australian—Right Hon. Sir Isaac Alfred Isaacs, G.C.M.G., Chief Justice of the High Court—appointed Governor-General of Australia. Telephone trunk line service established between Adelaide and Perth linking up the whole of the mainland States by telephone.
- 1931 Depression continues; Australia substantially off gold standard with exchange rate at 130 in January; 10 per cent. cut in Federal basic wage. First experimental air mail England to Australia and return. New South Wales Savings Bank suspension and subsequent absorption by Commonwealth Bank. Postponement of sinking fund payments on war debt to British Government for two years. Initiation of Premiers' Conference plan to meet the financial situation. Commonwealth Bank Act amended to provide for temporary lower reserve against notes; substantial export of gold reserves. Hoover Moratorium on War Debts. England departs from gold standard in September; depreciation of Australian £1 on Sterling continued. Wheat bounty granted. Commonwealth Bank assumed control of exchange rate and lowered it to 125. Government deficits total £25,370,000, 1930-31.
- 1932 Sydney Harbour Bridge opened. Australian Broadcasting Commission established. New South Wales Government default in interest payments made good by Commonwealth Government; conflict of Commonwealth and New South Wales governments. Lang Ministry dismissed in New South Wales. Emergency restrictions on imports relaxed. Legislation passed enabling note reserve to be held in sterling securities, and subsequent shipping of gold to the United Kingdom. Imperial Economic Conference at Ottawa, with consequential tariff agreements. Sugar Agreement modified. Taxation reductions and assistance to wheat-growers. Government deficits reduced to £19,500,000 for 1931-32.
- 1933 Third Commonwealth Census. Imperial Air-mail "Astraea" arrived. World Economic Conference in London. Australia elected as Member of League of Nations. Secession Referendum (Western Australia). Referendum for reduction and limitation of number of members of Legislative Council (New South Wales). Disarmament Conference in London. Record wheat harvest (213,927,000 bushels). Antarctica and Ashmore and Cartier Islands taken over by the Commonwealth. Government deficits reduced to £4,500,000 for 1932-33.

Year.

- 1934 Visit of H.R.H. the Duke of Gloucester to open Victorian Centenary Celebrations. Goodwill Mission to the East—Leader Rt. Hon. J. G. Latham. New Governors in Victoria and South Australia. Record flight from England to Australia by Messrs. Scott and Black (Centenary Air Race) in 71 hours. Inauguration of England-Australia Air Mail Service.
- 1935 Silver Jubilee of His Majesty King George V. Visit to London for Jubilee Celebrations of the Rt. Hon. J. A. Lyons, Prime Minister. Empire Statistical Conference at Ottawa. Japanese Goodwill Mission to Australia. Meeting of the British Medical Association for the first time in Australia.
- 1936 Death of His Majesty King George V. South Australian Centenary. Official opening of submarine telephone cable between Tasmania and the Mainland. Increased duties and import quotas on certain commodities designed to divert trade to Australian and British manufacturers and good customer foreign countries. Trade dispute with Japan. Rise in wheat prices. Decision of Privy Council in James case invalidated joint Commonwealth and State schemes for the orderly marketing of primary produce. Visit of British experts—Sir Walter Kinnear and Mr. G. H. Ince—to confer with the Commonwealth Government on the establishment in Australia of national insurance. Abdication of King Edward VIII.
- 1937 Referendum on Commonwealth control of aviation and marketing defeated on both counts. Coronation of King George VI. Imperial conference in London. New Education Fellowship Conference held in all States. Commonwealth basic wage increased by 5s. per week. Presentation of report of the Royal Commission on Monetary and Banking Systems in Australia. Agreement between English, Australian and New Zealand Governments on joint control of Tasman section of Empire Flying Boat Airmail Service.

OFFICIAL YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA, 1937.

CHAPTER I.

DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

§ 1. General.

Previous issues of the Official Year Book, up to and including No. 22, contained in this Chapter some account of the traditional ideas regarding the existence of a "Terra Australis," together with brief details relating to the discovery and annexation of the Australian continent. (It may be noted here that Captain Cook's arrival and landing at Botany Bay took place on the same day, i.e., 29th April, 1770.)

§ 2. The Exploration of Australia.

A fairly complete, though brief, account of the exploration of Australia was given in Year Book No. 2 (pp. 20 to 39), and a summary of the more important facts relating to the subject was embodied in this Chapter in succeeding issues up to and including No. 22.

§ 3. Establishment of the Commonwealth of Australia.

1. **General.**—On the 1st January, 1901, the six colonies (now known as States) and the Northern Territory were federated under the name of the "Commonwealth of Australia." The dates of creation and the areas of its component parts, as determined on the final adjustment of their boundaries, are shown in the following table :—

THE COMMONWEALTH OF AUSTRALIA.—AREA, ETC., OF COMPONENT PARTS.

State.	Year of Formation into Separate Colony.	Present Area in Square Miles.	State.	Year of Formation into Separate Colony.	Present Area in Square Miles.
New South Wales(a)	1786	310,372	Tasmania ..	1825	26,215
Victoria ..	1851	87,884	Northern Territory	1863	523,620
Queensland ..	1859	670,500			
South Australia ..	1834	380,070	Area of the Commonwealth ..	..	2,974,581
Western Australia	1829	975,920			

(a) Including the Federal Capital Territory embracing an area of 912 square miles, and 28 square miles at Jervis Bay. See par. 3, page 2.

2. **Transfer of the Northern Territory to the Commonwealth.**—On the 7th December, 1907, the Commonwealth and the State of South Australia entered into an agreement for the surrender to and acceptance by the Commonwealth of the Northern Territory, subject to approval by the Parliaments of the Commonwealth and the State. This

approval was given by the South Australian Parliament under the Northern Territory Surrender Act 1907 (assented to on the 14th May, 1908), and by the Commonwealth Parliament under the Northern Territory Acceptance Act 1910 (assented to on the 16th November, 1910). The Territory accordingly was transferred to the Commonwealth by proclamation on the 1st January, 1911.

3. **Transfer of the Federal Capital Territory to the Commonwealth.**—On the 18th October, 1909, the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 912 square miles as the seat of Government of the Commonwealth. In December, 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on the 5th December, 1910, a proclamation was issued vesting the Territory in the Commonwealth on and from the 1st January, 1911. By the Jervis Bay Territory Acceptance Act 1915, an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4th September, 1915.

4. **Transfer of British New Guinea or Papua.**—Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on the 1st September, 1906, under the authority of the Papua Act (Commonwealth) of 16th November, 1905. The area of Papua is about 90,540 square miles.

5. **Transfer of Norfolk Island.**—Although administered for many years by the Government of New South Wales, this Island was a separate Crown colony until 1st July, 1914, when it was transferred to the Commonwealth under the authority of the Norfolk Island Act 1913. The Island is situated in latitude $29^{\circ} 3' 45''$ south, longitude $167^{\circ} 58' 6''$ east, and comprises an area of 8,528 acres.

6. **Territory of New Guinea.**—It was agreed by the Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and 8° S., and in longitude between 141° E. and 150.25° E. The mandate was issued by the League of Nations on 17th December, 1920. The Governor-General of the Commonwealth was authorized to accept the mandate by the New Guinea Act 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The Territory comprises about 93,000 square miles, and the administration under the mandate dates from 9th May, 1921.

7. **Nauru.**—In 1919 the Governments of the United Kingdom, Australia and New Zealand entered into an agreement to make provision for the exercise of the mandate conferred on the British Empire for the administration of the island of Nauru, and for the mining of the phosphate deposits thereon. The island is situated in longitude 166° E., 26 miles south of the Equator, and comprises about 5,100 acres. The agreement provided that the administration of the island should be vested in an administrator, the first appointment to be made by the Commonwealth Government, and thereafter in such manner as the three Governments decided. The agreement was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and a supplementary agreement of 30th May, 1923, giving the Government immediately responsible for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate has operated from 17th December, 1920, and so far has been exercised by the Commonwealth through an Australian Administrator.

8. **Territory of Ashmore and Cartier Islands.**—By Imperial Order in Council dated 23rd July, 1931, Ashmore Islands, known as Middle, East and West Islands, and Cartier Island, situated in the Indian Ocean off the North-west Coast of Australia, were placed under the authority of the Commonwealth. The Islands were accepted by the Commonwealth in the Ashmore and Cartier Islands Acceptance Act 1933 under the name of the Territory of Ashmore and Cartier Islands and were transferred on 10th May, 1934.

9. **Australian Antarctic Territory.**—An Imperial Order in Council, 7th February, 1933, placed under the authority of the Commonwealth the Antarctic Territories, comprising all the islands and territory, other than Adélie Land, situated south of 60° S. latitude, and lying between 160° E. longitude and 45° E. longitude. The Territory was accepted by the Commonwealth under the name of the Australian Antarctic Territory in the Australian Antarctic Territory Acceptance Act 1933.

§ 4. The Constitutions of the States and of the Commonwealth.

1. **General.**—Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the Federal movement in Australia, was embodied in this Chapter in issues of the Official Year Book up to No. 22. In this issue the Constitution of the Commonwealth as at present amended is printed in full, together with the Financial Agreement of 1928 between the Commonwealth and States as affected by later agreements made under the provisions of Section 105A of the Constitution.

2. **Commonwealth Constitution Act.**—The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: "An Act to constitute the Commonwealth of Australia," as amended by the Constitution Alteration (Senate Elections) 1906, the Constitution Alteration (State Debts) 1909, and the Constitution Alteration (State Debts) 1928 is given *in extenso* hereunder.

THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT, 63 & 64 VICT., CHAPTER 12.

An Act to constitute the Commonwealth of Australia. [9th July, 1900.]

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian Colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.

2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.

3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.

4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.

5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

6. "The Commonwealth" shall mean the Commonwealth of Australia as established under this Act.

"The States" shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called "a State."

"Original States" shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

THE CONSTITUTION.

This Constitution is divided as follows:—

- Chapter I.—The Parliament:
 - Part I.—General:
 - Part II.—The Senate:
 - Part III.—The House of Representatives:
 - Part IV.—Both Houses of the Parliament:
 - Part V.—Powers of the Parliament:
- Chapter II.—The Executive Government:
- Chapter III.—The Judicature:
- Chapter IV.—Finance and Trade:
- Chapter V.—The States:
- Chapter VI.—New States:
- Chapter VII.—Miscellaneous:
- Chapter VIII.—Alteration of the Constitution.
- The Schedule.

CHAPTER I.—THE PARLIAMENT.

PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called "The Parliament," or "The Parliament of the Commonwealth."

2. A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen's pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State. The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the Senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the Senators of the first class shall become vacant at the expiration of [the third year] *three years*,* and the places of those of the second class at the expiration of [the sixth year] *six years*,* from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before** the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July** following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July** preceeding the day of his election.

* As amended by section 2 of the Constitution Alteration (Senate Elections) 1906. The words in square brackets have been repealed; amendments are shown in *italics*

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a Senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;

- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows :—

New South Wales ..	23	South Australia ..	6
Victoria ..	20	Tasmania ..	5
Queensland ..	8		

Provided that if Western Australia is an Original State, the numbers shall be as follows :—

New South Wales ..	26	South Australia ..	7
Victoria ..	23	Western Australia ..	5
Queensland ..	9	Tasmania ..	5

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provisions, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows :—

- (i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen :
- (ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, of a colony which has become or becomes a State, or of the Commonwealth, or of a State.

* The franchise qualification was determined by the Commonwealth Franchise Act 1902.

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- (i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or
- (ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or
- (iii) Is an undischarged bankrupt or insolvent: or
- (iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or
- (v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section iv. does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

- (i) Becomes subject to any of the disabilities mentioned in the last preceding section : or
- (ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors : or
- (iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State :

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House, shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

- (i) The mode in which its powers, privileges, and immunities may be exercised and upheld :
- (ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

PART V.—POWERS OF THE PARLIAMENT.†

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) Trade and commerce with other countries, and among the States :
- (ii) Taxation ; but so as not to discriminate between States or parts of States :
- (iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth :
- (iv) Borrowing money on the public credit of the Commonwealth :
- (v) Postal, telegraphic, telephonic, and other like services :
- (vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth :
- (vii) Lighthouses, lightships, beacons and buoys :
- (viii) Astronomical and meteorological observations :
- (ix) Quarantine :
- (x) Fisheries in Australian waters beyond territorial limits :
- (xi) Census and statistics :
- (xii) Currency, coinage, and legal tender :
- (xiii) Banking, other than State banking ; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money :

* The Parliamentary allowance was raised to £600 per annum in 1907 and to £1,000 per annum in 1920, when provision was also made for special allowances to the President of the Senate, the Speaker of the House of Representatives, and both the Chairman of Committees and the Opposition Leader in each House. Several reductions under Financial Emergency Legislation reduced the allowance to £750 per annum in 1932, but it has now been restored to £950.

† Particulars of proposed laws which were submitted to referenda are referred to in Chapter III.. General Government.

- (xiv) Insurance, other than State insurance ; also State insurance extending beyond the limits of the State concerned :
- (xv) Weights and measures :
- (xvi) Bills of exchange and promissory notes :
- (xvii) Bankruptcy and insolvency :
- (xviii) Copyrights, patents of inventions and designs, and trade marks :
- (xix) Naturalization and aliens :
- (xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth :
- (xxi) Marriage :
- (xxii) Divorce and matrimonial causes ; and in relation thereto, parental rights, and the custody and guardianship of infants :
- (xxiii) Invalid and old-age pensions :
- (xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States :
- (xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States :
- (xxvi) The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws :
- (xxvii) Immigration and emigration :
- (xxviii) The influx of criminals :
- (xxix) External affairs :
- (xxx) The relations of the Commonwealth with the islands of the Pacific :
- (xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws :
- (xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth :
- (xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State :
- (xxxiv) Railway construction and extension in any State with the consent of that State :
- (xxxv) Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State :
- (xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides :
- (xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law :
- (xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia :
- (xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes ;
- (ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth ;
- (iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed laws so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provisions therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.*

66. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth :—

Posts, telegraphs, and telephones :	Lighthouses, lightships, beacons, and buoys :
Naval and military defence :	Quarantine.

But the departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

* The Ministers of State were increased in 1915 to eight, in 1917 to nine, and in 1935 to ten. A sum of £1,650 was added to the annual appropriation for Ministers' salaries for each additional Minister and £800 per annum was allowed each Minister by the Parliamentary Allowances Act 1920. Reductions under Financial Emergency Legislation reached their maximum in 1932, when Ministers' salaries were reduced by 30 per cent. and their allowance as members by 25 per cent. As a result of Relief Legislation in 1936 both salaries and allowances are now subject to a reduction of 7½ per cent.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.

72. The Justices of the High Court and of the other Courts created by the Parliament—

- (i) Shall be appointed by the Governor-General in Council;
- (ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity;
- (iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.

73. The High Court shall have jurisdiction, with such exception and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

- (i) Of any Justice or Justices exercising the original jurisdiction of the High Court;
- (ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council;
- (iii) Of the Inter-State Commission, but as to questions of law only;

and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits inter se of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

75. In all matters—

- (i) Arising under any treaty;
- (ii) Affecting consuls or other representatives of other countries;

- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party :
 - (iv) Between States, or between residents of different States, or between a State and a resident of another State :
 - (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth :
- the High Court shall have original jurisdiction.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation :
- (ii) Arising under any laws made by the Parliament :
- (iii) Of Admiralty and maritime jurisdiction :
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court :
 - (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States :
 - (iii) Investing any court of a State with federal jurisdiction.
78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.
79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon ; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth ;

but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- (i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary;
- (ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth;
- (iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament;
- (iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- (i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- (ii) The Commonwealth shall debit to each State—
 - (a) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;
 - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.
- (iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully

made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

(i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State :

(ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth ; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

(i) Shall be appointed by the Governor-General in Council :

(ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity :

(iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the State shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (i) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

(a) *the taking over of such debts by the Commonwealth;*

(b) *the management of such debts;*

(c) *the payment of interest and the provision and management of sinking funds in respect of such debts;*

(d) *the consolidation, renewal, conversion, and redemption of such debts;*

(e) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*

(f) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(ii) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

* Under section 2 of the Constitution Alteration (State Debts) 1909, the words in square brackets are omitted.

† Under section 2 of the Constitution Alteration (State Debts) 1928, the Constitution was amended by the insertion of this section.

(iii) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*

(iv) *Any such agreement may be varied or rescinded by the parties thereto.*

(v) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(vi) *The powers conferred by this section shall not be construed as being limited in any way by the provisions of section one hundred and five of this Constitution.*

CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State; and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

SCHEDULE.

OATH.

I, A.B., do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. SO HELP ME GOD!

AFFIRMATION.

I, A.B., do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. (NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

3. **The Royal Proclamation.**—The preceding Act received the Royal assent on the 9th July, 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on the 17th September, 1900, constituted the Commonwealth as from the 1st January, 1901; it reads as follows:—

BY THE QUEEN.

A PROCLAMATION.

(Signed) VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled "An Act to constitute the Commonwealth of Australia," it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales, Victoria, South Australia, Queensland, and Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of January One thousand nine hundred and one, the people of *New*

South Wales, Victoria, South Australia, Queensland, Tasmania, and Western Australia shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN.

§ 5. The Financial Agreement between the Commonwealth and the States.

The original Financial Agreement between the Commonwealth and the States was made on the 12th December, 1927. It was later affected by the following agreements made under the powers conferred by section 105A of the Constitution:—

Debt Conversion Agreement—Made 21st July, 1931.

Debt Conversion Agreement (No. 2)—Made 22nd October, 1931.

Agreement relating to Soldier Settlement Loans—Made 3rd July, 1934.

A further Agreement was made between the Commonwealth and Tasmania only on the 1st July, 1928. This was not an amendment, but was made under the authority of Part III., Clause 3 (l) of the original Agreement.

The original Agreement as affected by the subsequent agreements referred to above is set out below. The Debt Conversion Agreements did not affect the wording of the main Agreement and were in general terms. That part of these Agreements referring to the original Agreement will be found on page 33. The agreement relating to Soldier Settlement Loans affected the original Agreement as regards:—

(a) Part I., Clause 2—Definitions—"Net public debt of a State existing on 30th June, 1927." (See page 22.)

(b) Part I., Clause 3, par. (a)—Constitution of the Australian Loan Council. (See page 23.)

These two amendments have been introduced into the original Agreement. The Agreement between the Commonwealth and Tasmania is referred to in a footnote to Part I., Clause 2—Definitions—in respect of the amount of £3,948,613 which represents the debt of Tasmania to the Commonwealth. (See page 22.)

FINANCIAL AGREEMENT, 1928.

Whereas with a view to making provision for the adjustment of Commonwealth and State financial relations the general principle of a draft scheme was affirmed by a Conference of Commonwealth and State Ministers in Melbourne which commenced on the sixteenth day of June One thousand nine hundred and twenty-seven;

And whereas permanent effect cannot be given to the proposals contained in the said scheme unless the Constitution of the Commonwealth is altered so as to confer on the Parliament of the Commonwealth power to make laws for carrying out or giving permanent effect to such proposals;

And whereas pending the submission to the electors of a proposed law for the alteration of the said Constitution as aforesaid and in order to obtain immediately some of the advantages which would result from united action by adoption of the said scheme the Commonwealth and the States have agreed that for the period commencing on the first day of July One thousand nine hundred and twenty-seven and ending on the thirtieth day of June One thousand nine hundred and twenty-nine certain of the proposed provisions of the said scheme shall be temporarily adopted:

Now this Agreement Witnesseth:

PART I.

1. This Agreement shall have no force or effect and shall not be binding on any party unless and until it is approved by the Parliaments of the Commonwealth and of the States.

2. DEFINITIONS.

In this Agreement—

"*Net Public debt of a State existing on 30th June, 1927,*" means in respect of each State the amount of debt set forth hereunder opposite to the name of that State, viz. :—

	£
New South Wales	234,088,501
Victoria	136,949,942
Queensland	101,977,855
South Australia	84,834,364
Western Australia	61,060,675
Tasmania	22,434,060
	<u>641,345,397</u>

The said amount of the net public debt of each State includes the debts of that State secured by—

- (i) Inscribed Stock, including Local Inscribed Stock and Government Inscribed Stock ;
- (ii) Instalment Stock ;
- (iii) Registered Stock ;
- (iv) Funded Stock ;
- (v) Stock payable to bearer ;
- (vi) Bonds, including registered bonds ;
- (vii) Debentures, including registered debentures and instalment debentures ;
- (viii) Treasury Bills not repayable within twelve months from the date of issue ; or
- (ix) Fixed deposit receipts or special deposit receipts for moneys borrowed for other than temporary purposes ;

issued or created by the State or by or on behalf of a Colony the predecessor of the State in respect of moneys borrowed by the Colony or State together with debts of the State to the Commonwealth of the amount set out respectively hereunder opposite to the name of the State so far as those last-mentioned debts are not included by being secured in manner aforesaid :—

	£
New South Wales	12,553,698
Victoria	23,688,209
Queensland	16,082,583
South Australia	18,446,197
Western Australia	16,739,872
Tasmania	3,948,613†
	<u>91,459,232</u>

after deducting therefrom the amount for which the Commonwealth by this Agreement assumes liability under Part III., Clause 4, of this Agreement and the amount of any moneys or securities standing to the credit of a sinking fund, redemption fund, or a fund of a like nature of the State as on 30th June, 1927, and does not include any moneys raised by the State by way of overdraft, fixed deposit, or special deposit for temporary purposes only.

* These amounts have been varied in accordance with the terms of the " Agreement relating to Soldier Settlement Loans " made 3rd July, 1934. The amended figures are—

	£
New South Wales	233,153,779
Victoria	136,348,982
Queensland	101,840,622
South Australia	84,029,376
Western Australia	61,060,675
Tasmania	22,314,180
	<u>638,747,614</u>

† An agreement between the Commonwealth and Tasmania was made under power conferred by Part III., Clause 3 (d) of this Agreement by which the Commonwealth took over as at 1st July, 1928, certain securities of the Tasmanian Sinking Fund to the value of £1,137,720 and thus reduced the debt of £3,948,613 due by the State to the Commonwealth by a like amount. (See Commonwealth Act No. 43 of 1928.)

The said sum of £234,088,501 (being the amount of the debt of New South Wales above-mentioned) comprises the debts referred to in, and has been computed in the manner shown in, the statement signed by representatives of the Commonwealth and of New South Wales.

"*Gross Public Debt of a State existing on 30th June, 1927,*" means in respect of each State the amount of debt set forth hereunder opposite to the name of that State, viz. :—

	£
New South Wales	239,441,363
Victoria	144,844,530
Queensland	105,259,916
South Australia	87,614,005
Western Australia	70,705,913
Tasmania	24,254,688
	<hr/>
	672,120,415

The said amount of the gross public debt of each State includes the net public debt of that State together with the amount for which the Commonwealth by this Agreement assumes liability under Part III., Clause (4), of this Agreement and the amount of any moneys or securities standing to the credit of any sinking fund redemption fund or fund of a like nature of the State as on 30th June, 1927.

"*Transferred Properties*" means the properties mentioned or specified in the Schedule of Transferred Properties signed by representatives of the Commonwealth and the States as revised to the 30th June, 1927, being properties which became vested in the Commonwealth pursuant to Section 85 (i) of the Constitution of the Commonwealth.

"*The Loan Council*" means the Australian Loan Council created in pursuance of this Agreement.

"*Bondholder*" means an owner of any—

- (i) Inscribed Stock, including Local Inscribed Stock and Government Inscribed Stock ;
- (ii) Instalment Stock ;
- (iii) Registered Stock ;
- (iv) Funded Stock ;
- (v) Stock payable to bearer ;
- (vi) Bonds, including registered bonds ;
- (vii) Debentures including registered debentures and instalment debentures ;
- (viii) Treasury Bills not repayable within twelve months from the date of issue ; or
- (ix) Fixed deposit receipts or special deposit receipts for moneys borrowed for other than temporary purposes ;

issued or created by a State or by or on behalf of a Colony the predecessor of the State in respect of borrowed moneys but does not include the Commonwealth.

3. AUSTRALIAN LOAN COUNCIL.

(a) * There shall be an Australian Loan Council which shall consist of one representative of the Commonwealth who shall be—

- (i) the Prime Minister of the Commonwealth ; or
- (ii) in the absence of the Prime Minister at any time from a meeting of the Council—
a Minister nominated in writing by the Prime Minister, and

* Paragraph (a) is an amendment effected by the Agreement relating to Soldier Settlement Loans (Commonwealth Act of 1934) replacing the original paragraph (a). The amendment provided that the Financial Agreement shall be read and construed as if the amendments to Clause 3 of Part I. of that Agreement, insofar as they authorize the Prime Minister and the Premier of a State to represent respectively the Commonwealth or a State on the Australian Loan Council, had been incorporated in that Agreement at the date of the making thereof.

One representative of each State who shall be—

- (i) the Premier of that State ; or
- (ii) in the absence of the Premier at any time from a meeting of the Council—
a Minister nominated in writing by the Premier of that State.

Provided that if in the opinion of the Prime Minister or of any Premier of a State, special circumstances exist at any time which make it desirable so to do, the Prime Minister or the Premier, as the case may be, may nominate some other person to represent the Commonwealth or the State (as the case may be) as a member of the Loan Council.

Any nomination of a representative of a State shall be notified in writing by the Premier of the State to the Prime Minister.

(b) The member representing the Commonwealth on the Loan Council shall hold office during the pleasure of the Prime Minister of the Commonwealth and a member representing a State shall hold office during the pleasure of the Premier of the State which the member was appointed to represent.

(c) A decision in which all the members for the time being of the Loan Council concur shall be a unanimous decision of the Loan Council notwithstanding any vacancy then existing in its membership.

(d) A meeting of the Loan Council may at any time be convened by the member representing the Commonwealth, and shall be so convened upon the request of at least three members representing States.

(e) A majority of the members of the Loan Council shall constitute a quorum of the Loan Council for the exercise of its powers at any meeting. Provided that—

- (i) a member may at any time appoint in writing a deputy to act in his absence; and any deputy so appointed may in the absence of the member exercise all the powers and functions of the member and his presence shall be deemed the presence of the member ; and

- (ii) an absent member who has not appointed a deputy may vote by letter or by telegram, and in such case that member shall be counted as being present in relation only to the questions on which he has voted.

(f) The Loan Council may make rules of procedure including rules relating to places, times, and notices of meetings, and conduct of business at meetings, and from time to time may alter such rules.

(g) The Commonwealth and each State will from time to time while Part II. of this Agreement is in force, and while Part III. of this Agreement is in force, submit to the Loan Council a programme setting forth the amount it desires to raise by loans for each financial year for purposes other than the conversion, renewal or redemption of existing loans or temporary purposes. Each programme shall state the estimated total amount of such loan expenditure for the year, and the estimated amount of repayments which will be available towards meeting that expenditure. Any revenue deficit to be funded shall be included in such loan programme, and the amount of such deficit shall be set out. Loans for Defence purposes approved by the Parliament of the Commonwealth shall not be included in the Commonwealth's loan programme or be otherwise subject to this agreement.

(h) If the Loan Council decides that the total amount of the loan programme for the year cannot be borrowed at reasonable rates and conditions it shall decide the amount to be borrowed for the year, and may by unanimous decision allocate such amount between the Commonwealth and the States.

(i) If the members of the Loan Council fail to arrive at a unanimous decision under the last preceding sub-clause allocating the amount to be borrowed for any year, the amount to be borrowed for that year shall be allocated as follows :—

- (i) The Commonwealth shall, if it so desires, be entitled to have one-fifth or any less proportion of such amount allocated to the Commonwealth ; and
- (ii) Each State shall be entitled to have allocated to it a sum (being a portion of the balance of such amount) bearing to the balance of such amount the same proportion which the net loan expenditure of that State in the preceding five years bears to the net loan expenditure of all the States during the same period. Provided that any State may, if it so

desires, have allocated to it a sum less than the sum to which it is entitled under this sub-clause or no sum, and that when a less sum or no sum has been allocated to any State or States in manner aforesaid the amount then remaining available for allocation shall be allocated to the other States in the proportion which the net loan expenditure of each of such other States in the preceding five years bears to the net loan expenditure of all such other States during the same period. For the purposes of this sub-clause net loan expenditure does not include expenditure for the conversion, renewal, or redemption of loans, but means the gross other loan expenditure of a State less any amounts of such expenditure repaid to the State other than moneys repaid to the State in manner stated in Part II., clause 4 (e), or Part III., clause 3 (i), of this Agreement.

(j) If the total amount to be borrowed as aforesaid for any year is to be borrowed by means of more than one loan the Loan Council may by unanimous decision apportion between the Commonwealth and the States the amount to be borrowed by each such loan other than the loan by means of which the balance of the total amount to be borrowed as aforesaid for the year is borrowed.

(k) If the members of the Loan Council fail to arrive at a unanimous decision under the last preceding sub-clause apportioning the amount to be borrowed as aforesaid by any loan the amount to be borrowed by that loan shall be apportioned between the Commonwealth and the States in proportion to the amount then to be borrowed as aforesaid for the Commonwealth and for each State for the year.

(l) The Commonwealth and each State will also from time to time, while Part II. of this Agreement is in force and while Part III. of this Agreement is in force, submit to the Loan Council a statement setting out the amount it requires for each financial year for the conversion, renewal or redemption of existing loans.

(m) If the members of the Loan Council fail to arrive at a unanimous decision on any matter other than the matters referred to in sub-clauses (h) and (j) of clause 3 and sub-clause (b) of clause 4 of this part of this Agreement, the matter shall be determined by a majority of votes of the members.

On every question for decision by the Loan Council the member representing the Commonwealth shall have two votes and a casting vote, and each member representing a State shall have one vote.

(n) A decision of the Loan Council in respect of a matter which the Loan Council is by this Agreement empowered to decide shall be final and binding on all parties to this Agreement.

(o) In this clause the expressions "Prime Minister" and "Premier" include the persons for the time being respectively acting as such.

4. FUTURE BORROWINGS OF COMMONWEALTH AND STATES.

(a) Except in cases where the Loan Council has decided under sub-clause (b) of this clause that moneys shall be borrowed by a State, the Commonwealth, while Part II. or Part III. of this Agreement is in force, shall, subject to the decisions of the Loan Council and subject also to clauses 5 and 6 of this Part of this Agreement, arrange for all borrowings for or on behalf of the Commonwealth or any State, and for all conversions, renewals, redemptions, and consolidations of the Public Debts of the Commonwealth and of the States.

(b) If at any time the Loan Council by unanimous decision so decides, a State may in accordance with the terms of the decision borrow moneys outside Australia in the name of the State, and issue securities for the moneys so borrowed. The Commonwealth shall guarantee that the State will perform all its obligations to bondholders in respect of the moneys so borrowed. For all the purposes of this Agreement, including the making of sinking fund contributions, the moneys so borrowed shall be deemed to be moneys borrowed by the Commonwealth for and on behalf of that State.

(c) If any State after the 30th June, 1927, and before this Agreement has been approved by the Parliaments of the Commonwealth and of the States, has borrowed moneys in the name of the State and issued securities for the moneys so borrowed, such moneys shall for all the purposes of this Agreement, including the making of sinking fund contributions, be deemed to be moneys borrowed by the Commonwealth for and on behalf of that State.

(d) While Part II. or Part III. of this Agreement is in force, moneys shall not be borrowed by the Commonwealth or any State otherwise than in accordance with this Agreement.

5. BORROWING BY STATES.

For any purpose (including the redemption of securities given or issued at any time for moneys previously borrowed or used in manner stated in this clause) a State may, while Part II. or Part III. of this Agreement is in force :—

(a) Subject to any maximum limits decided upon by the Loan Council from time to time for interest, brokerage, discount and other charges, borrow moneys within the State from authorities, bodies, funds or institutions (including Savings Banks) constituted or established under Commonwealth or State law or practice and from the public by counter sales of securities, and

(b) use any public moneys of the State which are available under the laws of the State.

Any securities that are issued for moneys so borrowed or used shall be Commonwealth securities, to be provided by the Commonwealth upon terms approved by the Loan Council.

Where any such borrowing or use is solely for temporary purposes, the provisions of this Agreement, other than this clause, shall not apply.

Where any such borrowing or use is not solely for temporary purposes, and Commonwealth securities are issued in respect thereof, the moneys borrowed or used shall be deemed to be moneys borrowed by the Commonwealth for and on behalf of the State, and may be retained by the State. A State may convert securities given or issued at any time by that State for moneys previously borrowed or used in manner stated in this clause. New securities issued on any such conversion shall be Commonwealth securities to be provided by the Commonwealth upon terms approved by the Loan Council. The amount for which such new securities are issued shall be deemed to be moneys borrowed by the Commonwealth for and on behalf of the State.

If the moneys deemed under this clause to be moneys borrowed by the Commonwealth on behalf of a State, together with the amounts raised by the Commonwealth for and on behalf of the State exceed the total amount of loan moneys decided upon by the Loan Council as the moneys to be raised for and on behalf of the State for the financial year in which the money is deemed to be borrowed, the excess shall, unless the Loan Council otherwise decides, be deemed to be moneys received by the State in the following year on account of its loan programme for that year.

For the purposes of this clause counter sales of securities shall be deemed to mean sales of securities made at the office of the State Treasury, and at such other places as may be decided upon by the Loan Council.

The Commonwealth shall not be under any obligation to make sinking fund contributions in respect of moneys borrowed or used pursuant to this clause to meet a revenue deficit of a State, but the provisions of clause 4 (d) of Part II. and of clause 3 (j) of Part III. of this Agreement shall apply respectively to all moneys borrowed or used for that purpose.

Except in cases where the Loan Council has otherwise decided under sub-clause (b) of clause 4 of Part I. of this Agreement a State shall not have the right to invite loan subscriptions by the issue of a public prospectus.

Notwithstanding anything contained in this Agreement, any State may use for temporary purposes any public moneys of the State which are available under the laws of the State, or may, subject to maximum limits (if any) decided upon by the Loan Council from time to time for interest, brokerage, discount and other charges, borrow money for temporary purposes by way of overdraft, or fixed, special, or other deposit, and the provisions of this Agreement other than this paragraph shall not apply to such moneys.

6. BORROWING BY COMMONWEALTH.

For any purpose (including the redemption of securities given or issued at any time for moneys previously borrowed or used in manner stated in this clause) the Commonwealth may—while Part II. or Part III. of this Agreement is in force—

(a) Subject to any maximum limits decided upon by the Loan Council from time to time for interest, brokerage, discount and other charges, borrow moneys within the Commonwealth from authorities, bodies, funds or institutions (including Savings Banks) constituted or established under Commonwealth or State law or practice and from the public by counter sales of securities, and

(b) use any public moneys of the Commonwealth which are available under the laws of the Commonwealth

Any securities that are issued for moneys so borrowed or used shall be Commonwealth securities, to be provided by the Commonwealth upon terms approved by the Loan Council.

Where any such borrowing or use is solely for temporary purposes, the provisions of this Agreement, other than this clause, shall not apply.

Where any such borrowing or use is not solely for temporary purposes, and Commonwealth securities are issued in respect thereof, the moneys borrowed or used may be retained by the Commonwealth. The Commonwealth may convert securities given or issued at any time by the Commonwealth for moneys previously borrowed or used in manner stated in this clause. New securities issued on any such conversion shall be Commonwealth securities to be provided by the Commonwealth upon terms approved by the Loan Council.

If the moneys so borrowed or used are not borrowed or used solely for temporary purposes and Commonwealth securities are issued in respect thereof, and such moneys, together with other moneys borrowed by the Commonwealth for and on behalf of the Commonwealth as part of the total amount of loan moneys decided upon by the Loan Council as the moneys to be raised for and on behalf of the Commonwealth for the financial year in which the securities are issued, exceed such total amount the excess shall unless the Loan Council otherwise decides be deemed to be moneys received by the Commonwealth in the following year on account of its loan programme for that year.

For the purposes of this clause counter sales of securities shall be deemed to mean sales of securities made at the offices of the Commonwealth Treasury, and at such other places as may be decided upon by the Loan Council.

Notwithstanding anything contained in this Agreement, the Commonwealth may use for temporary purposes any public moneys of the Commonwealth which are available under the laws of the Commonwealth or may, subject to maximum limits (if any) decided upon by the Loan Council from time to time for interest, brokerage, discount and other charges, borrow money for temporary purposes by way of overdraft, or fixed, special or other deposit, and the provisions of this Agreement other than this paragraph shall not apply to such moneys.

7. PAYMENT OF INTEREST AND SINKING FUNDS.

[Not reprinted.—This section which is obsolete provided for payment of interest and sinking fund on certain loans in the event of Part III. of the Agreement not coming into force.]

PART II.

[Not reprinted.—This Part which is obsolete provided for interest and sinking fund during the period 1st July, 1927, up to the actual taking over of States' debts by the Commonwealth on 1st July, 1929. The intention was to carry out the permanent arrangements proposed in Part III. so far as they were applicable to the interim period.]

PART III.

This Part of this Agreement shall not come into force or be binding upon any party hereto unless before the 1st July, 1929, the Constitution of the Commonwealth has been altered in accordance with the proposals referred to in Part IV. of this Agreement and a law of the Parliament of the Commonwealth has been made thereunder validating this Agreement, but shall come into full force and effect if and when before the said date the Constitution is so altered and this Agreement is so validated.

When this Part of this Agreement comes into force every matter or thing done and payment made under or in pursuance of Part II. of this Agreement shall be deemed, so far as is practicable, to have been done or made under this Part of this Agreement to the same extent as if this Part had then in fact been in force, and all necessary adjustments shall be made in respect of moneys so paid in order to ensure that no party hereto shall be liable for or make double payments in respect of the same matter.

PERMANENT PROVISIONS.

I. TAKING OVER STATES' PUBLIC DEBTS.

Subject to the provisions of this Part of this Agreement the Commonwealth will take over on the 1st July, 1929 :—

- (i) the balance then unpaid of the gross public debt of each State existing on 30th June, 1927; and
- (ii) all other debts of each State existing on the 1st July, 1929, for moneys borrowed by that State which by this Agreement are deemed to be moneys borrowed by the Commonwealth for and on behalf of that State—

and will in respect of the debts so taken over assume as between the Commonwealth and the States the liabilities of the States to bondholders.

2. PAYMENT OF INTEREST.

(a) Subject to this clause the Commonwealth will pay to bondholders from time to time interest payable on the Public Debts of the States taken over by the Commonwealth as aforesaid other than debts due by the States to the Commonwealth.

(b) The Commonwealth will in each year during the period of 58 years, commencing on 1st July, 1927, provide by equal monthly instalments the following amounts in respect of each State as shown hereunder towards the interest payable by that State :—

					£
New South Wales	..	..	..	..	2,917,411
Victoria	..	..	..	..	2,127,159
Queensland	..	..	..	..	1,096,235
South Australia	..	..	..	..	703,816
Western Australia	..	..	..	..	473,432
Tasmania	..	..	..	..	260,859
					<hr/>
					7,584,912

(c) Each State shall in each year during the same period of 58 years pay to the Commonwealth the excess over the amounts to be provided by the Commonwealth under the last preceding sub-clause necessary to make up as they fall due the interest charges falling due in that year on the public debt of that State taken over by the Commonwealth as aforesaid and then unpaid, and on any moneys borrowed by the Commonwealth on behalf of that State and then unpaid, and after the expiration of the said period each State shall in each year pay to the Commonwealth, as they fall due, the whole of the interest charges on any debt then unpaid and included in the public debt of that State taken over by the Commonwealth as aforesaid, and on any moneys borrowed by the Commonwealth on behalf of that State and then unpaid.

(d) The method by which payments shall be made by a State under sub-clause (c) of this clause shall be arranged from time to time between the Commonwealth and that State.

(e) The rate of interest payable under sub-clause (c) of this clause in respect of moneys borrowed by the Commonwealth on behalf of a State shall be the full rate of interest payable by the Commonwealth in respect of the loan by which such moneys were borrowed or such other rate of interest as may be payable by the State to the Commonwealth under any Agreement made or to be made between the Commonwealth and that State in respect of such moneys and such interest shall be payable by the State for the full term of that loan.

3. SINKING FUNDS.

(a) A sinking fund at the rate of 7s. 6d. per annum for each £100 of the net public debts of the States existing on 30th June, 1927, shall be established in the manner hereinafter set forth.

(b) During the period of fifty-eight years commencing on the 1st July, 1927, the Commonwealth shall pay from revenue annually a sinking fund contribution at the rate of 2s. 6d. for each £100 of the net public debts of the States existing on 30th June, 1927, and each State (other than the State of New South Wales) shall in each year during the said period pay from revenue a sinking fund contribution at the rate of 5s. for each £100 of the net public debt of such State existing on 30th June, 1927. The State of New South Wales during the period of fifty-eight years commencing on the 1st July, 1928, shall in each year pay from revenue a sinking fund contribution at the rate of 5s. for each £100 of the net public debt of that State existing on 30th June, 1927.

(c) Where in respect of any debt included in the gross Public Debt of a State existing at the 30th June, 1927, there is under laws or contracts existing at that date an obligation to provide a sinking fund at a rate in excess of 7s. 6d. per annum for each £100, any amount to be so provided in excess of 7s. 6d. per annum for each £100 shall be provided out of the National Debt Sinking Fund, established under the laws of the Commonwealth. Provided that if any law imposing such an obligation is repealed or is amended so as to reduce the rate of sinking fund to be provided the only amount (if any) to be provided out of the National Debt Sinking Fund pursuant to this sub-clause in respect of that debt shall as from the date of such repeal or amendment be the amount (if any) by which the reduced rate of sinking fund for the time being exceeds 7s. 6d. per annum for each £100.

(d) When a loan is issued for the conversion, renewal, or redemption of any debt of a State included in the gross Public Debt of that State existing on 30th June, 1927, the only sinking fund contributions to be made by the Commonwealth and that State in respect of the debt so converted, renewed, or redeemed shall be sinking fund contributions at the same rate and for the same period and upon the same amount as if such debt had not been converted, renewed, or redeemed.

(e) Subject to sub-clauses (h) and (j) of this clause a sinking fund at the rate of 10s. per annum for each £100 of the amount of each new loan raised by a State or by the Commonwealth for and on behalf of a State after 30th June, 1927, shall be established.

(f) Subject to sub-clauses (h) and (j) of this clause, in each year during the period of fifty-three years from the date of the raising after 30th June, 1927, of any new loan by a State or by the Commonwealth for and on behalf of a State the Commonwealth and that State shall each pay from revenue a sinking fund contribution of a sum equal to 5s. for each £100 of the amount of the new loan.

Provided that the period of fifty-three years during which the State of New South Wales shall make sinking fund contributions in respect of new loans raised in the financial year beginning on the 1st July, 1927, shall commence on the 1st July, 1928.

(g) For the purpose of the last two preceding sub-clauses a loan issued after the 30th June, 1927, to meet a revenue deficit which accrued on or before that date shall be deemed to be a new loan, but a loan issued for the conversion, renewal or redemption of a debt shall not be deemed to be a new loan, and where a loan is issued partly for the conversion, renewal, or redemption of a debt and partly for other purposes, so much only of the loan as has been issued for other purposes shall be deemed to be a new loan.

(h) Where it is agreed between the Commonwealth and a State that a loan or any portion of a loan raised after 30th June, 1927, and expended or to be expended upon wasting assets should be redeemed within a shorter period than fifty-three years, the annual sinking fund contributions of the State, in respect of that loan or the portion thereof, shall be increased to an amount which with the sinking fund contributions of the Commonwealth in respect of that loan or the portion thereof will provide for the redemption of that loan or the portion thereof within such shorter period. All sinking fund contributions of the State in respect of that loan or the portion thereof shall cease on the expiration of the shorter period, but the Commonwealth contributions in respect of that loan shall continue for the remainder of the period of fifty-three years from the date of the raising of that loan, and during such remainder of the period the State contributions to the sinking fund in respect of other loans of that State shall be reduced by the amount of the Commonwealth contributions during that remainder of the period in respect of such redeemed loan or the portion thereof. For the purposes of this sub-clause the sinking fund contributions of the Commonwealth and the State shall be deemed to accumulate at the rate of $4\frac{1}{2}$ per centum per annum compounded.

(i) Where loan moneys have been advanced by a State under terms providing for the repayment of such moneys the State shall as and when such moneys are repaid pay such moneys either to the State Loan Fund or to the account or fund from which such moneys were advanced, or to the sinking fund and shall in addition make from revenue its sinking fund contributions in respect of the loan or loans from which the moneys so advanced were provided.

Provided that when loan moneys have been advanced by a State to a Public or Local Authority or body constituted by the State or under the laws of the State and the Authority or body repays such moneys out of its revenue the State may out of moneys so repaid make its sinking fund contributions in respect of the loan moneys so advanced.

(j) In respect of any loan raised after the 30th June, 1927, by a State or by the Commonwealth for and on behalf of a State to meet a revenue deficit accruing after that date no sinking fund contributions shall be payable by the Commonwealth, but that State shall for a period sufficient to provide for the redemption of that loan pay from revenue in each year during such period a sinking fund contribution at a rate of not less than 4 per centum per annum of the amount of that loan. For the purposes of this sub-clause the sinking fund contributions of the State shall be deemed to accumulate at the rate of $4\frac{1}{2}$ per centum per annum compounded.

(k) All sinking fund contributions to be made in pursuance of this part of this Agreement shall be debts payable to the National Debt Commission as follows:—

(i) As regards the net public debt of a State existing on 30th June, 1927—by half-yearly instalments on 30th September and 31st March in each financial year or on such other dates as may be agreed between the Commonwealth and that State.

(ii) As regards loans raised after 30th June, 1927—by equal instalments on the dates on which interest on such loans is payable or on such other dates as may be agreed upon between the Commonwealth and the State concerned.

(l) Subject to the next succeeding sub-clause all moneys and securities standing to the credit of sinking funds, redemption funds and funds of a like nature of a State existing on 30th June, 1929, shall forthwith be transferred by the States to the National Debt Commission. Nothing in this sub-clause contained shall be deemed to limit the power of a State to cancel before 30th June, 1929, any such securities.*

(m) Where the conditions relating to sinking funds, redemption funds, and funds of a like nature as aforesaid held by a State on trust or by trustees under statutory or contractual obligations preclude the transfer of those funds to the National Debt Commission, such funds shall remain under the control of the State or those trustees, and the National Debt Commission will either directly or through the State concerned make all future payments to the State or to those trustees from the sinking fund.

* An Agreement between the Commonwealth and Tasmania was made under power conferred by this Clause whereby the Commonwealth took over as at 1st July, 1928, certain securities of the Tasmanian Sinking Fund to the value of £1,137,720 and thus reduced the debt of £2,048,613 due by the State to the Commonwealth by a Memorandum. (See Commonwealth Act No. 43 of 1928.)

(n) The sinking funds to be established under this Agreement shall be controlled by the National Debt Commission. The National Debt Commission may arrange with any State to act as its agent in connexion with payments due to bondholders.

(o) Sinking Fund contributions made under this Agreement in respect of the debts of a State and funds of that State transferred to the National Debt Commission under sub-clause (l) of this clause will not be accumulated, but (subject to sub-clauses (m) and (p) of this clause) will be applied to the redemption of the public debts of that State and of loans raised by the Commonwealth for and on behalf of that State, or to the purchase of securities issued in respect thereof.

(p) If at any time it is deemed inexpedient by the National Debt Commission to apply sinking funds in the manner set forth in sub-clause (o) of this clause, such funds may be temporarily invested in any securities in which the National Debt Commission is from time to time by law authorized to invest moneys.

(q) When a security issued in respect of a public debt of a State or of a loan raised by the Commonwealth for and on behalf of a State is repurchased or redeemed by the National Debt Commission such security shall be cancelled—

(i) if a repurchased security—on the last day of September, December, March, or June next ensuing after the date of repurchase, or on the date of maturity of the security whichever shall first occur; and

(ii) if a redeemed security—on the date of redemption.

In addition to the sinking fund contributions otherwise payable in respect of that debt or loan the State concerned shall—

(i) as from the date of cancellation of each security and for the full period during which the said sinking fund contributions are payable make from revenue a further sinking fund contribution at the rate of $4\frac{1}{2}$ per centum per annum of the face value of the cancelled security; and

(ii) also pay to the National Debt Commission interest on the face value of each repurchased security at the rate provided by the security from the last date preceding the repurchase upon which interest was payable under the terms of the security up to the date of cancellation of the security.

4. TRANSFERRED PROPERTIES.

It is agreed that all questions between the Commonwealth and the States relating to State properties transferred to the Commonwealth or acquired by the Commonwealth under section 85 of the Constitution shall be settled as follows:—

The States will as from 1st July, 1929, and as between the Commonwealth and the States be completely free and discharged from all liability whether in respect of principal, interest or sinking fund, or otherwise, which liability shall be assumed by the Commonwealth in respect of so much of the public debts of the States bearing interest at the rate of 5 per centum per annum, taken over by the Commonwealth as aforesaid as amounts to the agreed value of transferred properties, namely, £10,924,323, apportioned to the several States as follows:—

					£
New South Wales	..	..	..	..	4,788,005
Victoria	..	..	..	..	2,302,862
Queensland	..	..	..	..	1,560,639
South Australia	..	..	..	..	1,035,631
Western Australia	..	..	..	..	736,432
Tasmania	..	..	..	..	500,754
Total	..	..	..	..	10,924,323

The particular portion of the public debt of each State in respect of which the States shall become free and discharged from liability shall be determined by the Commonwealth

Each State will issue to the Commonwealth freehold titles (or, if the laws of any State do not permit of the issue of freehold titles, then titles as near to freehold as the laws of that State will permit) for transferred properties consisting of land or interests in land in that State, and all liability of the Commonwealth to the State in respect of transferred properties shall as from the 1st July, 1929, be extinguished.

The provisions of clauses 2 and 3 of this Part of this Agreement shall not apply to the said amount of £10,924,323.

PART IV.—MISCELLANEOUS.

I. EXPENSES OF LOAN FLOTATION.

Each State shall repay to the Commonwealth all expenses incurred or payments made by the Commonwealth in the performance of this Agreement in relation to the State including the following expenses and payments:—

- (i) Loan flotation charges;
- (ii) Management charges;
- (iii) Stamp duties on transfer of securities;
- (iv) Commission on payment of interest;
- (v) Expenses incurred in the conversion, renewal, redemption, or consolidation of loans;
- (vi) Exchange on transference of moneys.

Unless it is otherwise agreed between the Commonwealth and a State the Commonwealth will not do anything in connexion with a loan of that State existing on the 30th June, 1927, or raised thereafter pursuant to this Agreement which if done by that State would be a breach of any now existing agreement by that State with any Bank.

A certificate by the Auditor-General of the Commonwealth stating the amount to be repaid by a State to the Commonwealth and the matter in respect of which the repayment is to be made shall in the event of a dispute be conclusive as to the amount and matter stated.

2. ALTERATION OF THE CONSTITUTION.

The Commonwealth will take the necessary action to submit to the Parliament of the Commonwealth and to the electors proposals for the alteration of the Constitution of the Commonwealth in the following form:—

"105A. (i) The Commonwealth may make agreements with the States with respect to the public debts of the States, including—

- (a) the taking over of such debts by the Commonwealth;
- (b) the management of such debts;
- (c) the payment of interest and the provision and management of sinking funds in respect of such debts;
- (d) the consolidation, renewal, conversion, and redemption of such debts;
- (e) the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and
- (f) the borrowing of money by the States or by the Commonwealth or by the Commonwealth for the States.

(ii) The Parliament may make laws for validating any such agreement made before the commencement of this section.

(iii) The Parliament may make laws for the carrying out by the parties thereto of any such agreement.

(iv) Any such agreement may be varied or rescinded by the parties thereto.

(v) Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto, notwithstanding anything contained in this Constitution or the constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.

(vi) The powers conferred by this section shall not be construed as being limited in any way by the provisions of section 105 of this Constitution."

[For result of referendum see Chapter III., § 2.]

3. INDEMNITY.

Each State agrees with the Commonwealth that it will by the faithful performance of its obligations under this Agreement indemnify the Commonwealth against all liabilities whatsoever in respect of the public debt of that State taken over by the Commonwealth as aforesaid (other than the liabilities of the Commonwealth under this Agreement to pay interest and to make sinking fund contributions and under clause 4 of Part III. of this Agreement), and in respect of all loans of that State in respect of which this Agreement provides that sinking fund contributions shall be made.

4. ACCOUNTS.

Separate accounts shall be kept by the Commonwealth for each State in respect of Debt, Interest, and Sinking Funds.

Although the Debt Conversion Agreements already referred to did not affect the wording of the Financial Agreement they contained the following provisions:—

Debt Conversion Agreement—made 21st July, 1931—

“4. So far as the provisions of this Agreement may not be in accordance with any provisions of the Financial Agreement between the parties hereto, dated Twelfth day of December, 1927, the provisions of this Agreement shall prevail.”

Debt Conversion Agreement (No. 2)—22nd October, 1931—

“5. So far as this Agreement may not be in accordance with the provisions of the said Financial Agreement, the provisions of this Agreement shall prevail.”

[*Note re Validity of Act.*—Consequent upon the failure of the State of New South Wales to provide certain interest payments on its public debts in accordance with the Financial Agreement, the Commonwealth Parliament passed a Financial Agreement Enforcement Act (No. 3 of 1932). The State of New South Wales attacked the validity of this Act as being *ultra vires* the Commonwealth Parliament, and an infringement of State rights in respect to the appropriation of public moneys for specific services. The High Court by a majority decision of four to two held that this was a valid law and dismissed the action, subsequently refusing leave to appeal to the Privy Council.]

CHAPTER II.

PHYSIOGRAPHY.

§ 1. General Description of Australia.

1. *Geographical Position.*—(i) *General.* The Australian Commonwealth, which includes the island continent of Australia proper and the island of Tasmania, is situated in the Southern Hemisphere, and comprises in all an area of about 2,974,581 square miles, the mainland alone containing about 2,748,305 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes $113^{\circ} 9'$ E. and $153^{\circ} 39'$ E., while its northern and southern limits are the parallels of latitude $10^{\circ} 41'$ S. and $39^{\circ} 8'$ S., or, including Tasmania, $43^{\circ} 39'$ S. On its north are the Timor and Arafura Seas and Torres Strait—on its south the Southern Ocean and Bass Strait. The extreme points are “Steep Point” on the west, “Cape Byron” on the east, “Cape York” on the north, “Wilson’s Promontory” on the south, or, if Tasmania be included, “South-East Cape.”

(ii) *Tropical and Temperate Regions.* Of the total area of Australia nearly 40 per cent. lies within the tropics. Assuming, as is usual, that the latitude of the Tropic of Capricorn is $23^{\circ} 30'$ S. (its mean value for 1030 was $23^{\circ} 26' 51.17''$), the areas within the tropical and temperate zones are approximately as follows:—

AUSTRALIA—AREAS OF TROPICAL AND TEMPERATE REGIONS.

(STATES AND TERRITORY PARTIALLY WITHIN TROPICS.)

Area.	Queensland.	Western Australia.	Northern Territory.	Total.
	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.
Within Tropical Zone	359,000	364,000	426,320	1,149,320
Within Temperate Zone	311,500	611,020	97,300	1,020,720
Ratio of Tropical part to whole State ..	0.535	0.373	0.814	0.530
Ratio of Temperate part to whole State ..	0.465	0.627	0.186	0.470

Thus the tropical part is roughly about one-half (0.530) of the three territories mentioned above, or about five-thirteenths of the whole of Australia (0.386).

2. *Area of Australia compared with Areas of other Countries.*—It is not always realized that the area of Australia is almost as great as that of the United States of America, four-fifths of that of Canada, more than one-fifth of the area of the British Empire, nearly three-fourths of the whole area of Europe, and about 25 times as large

as Great Britain and Ireland. This great area, coupled with a limited population, renders the solution of the problem of Australian development a particularly difficult one. The areas of Australia and of certain other countries are given in the following table :

AREA OF AUSTRALIA AND OF OTHER COUNTRIES.

Country.	Area.	Country.	Area.
Continental Divisions—	Sq. miles.	AFRICA—continued.	Sq. miles
Europe	4,412,000	Union of South Africa ..	472,000
Asia	16,020,000	Egypt	386,000
Africa	11,562,000	Tanganyika Territory ..	374,000
North and Central America		Nigeria and Protectorate ..	373,000
and West Indies ..	8,649,000	Abyssinia	347,000
South America ..	7,010,000	Tripolitania	347,000
Australasia and Polynesia	3,462,000	South-West Africa ..	322,000
Total, exclusive of Arctic		Portuguese East Africa ..	298,000
and Antarctic Conts. . .	51,115,000	Northern Rhodesia ..	288,000
Europe—		Cyrenaica	285,000
Soviet Union (Russia) ..	2,316,000	Bechuanaland Protectorate	275,000
France	213,000	Madagascar	238,000
Spain (inc. possessions) ..	194,000	Kenya Colony and Protec-	
Germany	181,000	torate	225,000
Sweden	173,000	Other	1,444,000
Poland	150,000	Total	11,562,000
Finland	150,000	North and Central America—	
Norway	125,000	Canada	3,684,000
Italy	120,000	United States of America ..	3,027,000
Rumania	114,000	Mexico	760,000
Yugoslavia	96,000	Alaska	587,000
Great Britain and Northern		Newfoundland and Labra-	
Ireland	95,000	dor	163,000
Other	485,000	Nicaragua	49,000
Total	4,412,000	Other	379,000
Asia—		Total	8,049,000
Soviet Union (Russia) ..	5,860,000	South America—	
China and Dependencies ..	4,287,000	Brazil	3,292,000
British India and Adminis-		Argentine Republic ..	1,078,000
tered Territories ..	1,096,000	Bolivia	515,000
Arabia and Autonomous		Peru	482,000
States	1,004,000	Colombia (exc. of Panama)	449,000
Feudatory Indian States ..	712,000	Venezuela	352,000
Iran	628,000	Chile	286,000
Dutch East Indies ..	574,000	Ecuador	119,000
Turkey	285,000	Other	437,000
Japan and Dependencies ..	262,000	Total	7,010,000
Afghanistan	251,000	Australasia and Polynesia—	
Siam	200,000	Commonwealth of Australia	2,974,581
Other	861,000	Dutch New Guinea ..	161,000
Total	16,020,000	New Zealand and Depen-	
Africa—		dencies	104,015
French West Africa ..	1,790,000	Territory of New Guinea ..	93,000
Anglo-Egyptian Sudan ..	973,000	Papua	90,540
French Equatorial Africa	871,000	Other	38,474
Belgian Congo	921,000	Total	3,461,610
Algeria	848,000	British Empire	13,355,426
Angola	485,000		

The figures quoted in the table have been extracted from the Statistical Year Book of the League of Nations or the Statesman's Year Book.

3. Areas of Political Subdivisions.—As already stated, Australia consists of six States and the Northern and Federal Capital Territories. The areas of these, and their proportions of the total of Australia, are shown in the following table :—

AUSTRALIA—AREA OF STATES AND TERRITORIES.

State or Territory.	Area.	Percentage on Total.
	Sq. miles.	%
New South Wales	309,432	10.40
Victoria	87,884	2.96
Queensland	670,500	22.54
South Australia	380,070	12.78
Western Australia	975,920	32.81
Tasmania	26,215	0.88
Northern Territory	523,620	17.60
Federal Capital Territory ..	940	0.03
Total	2,974,581	100.00

4. Coastal Configuration.—(i) *General*. There are no striking features in the configuration of the coast; the most remarkable indentations are the Gulf of Carpentaria on the north, and the Great Australian Bight on the south. The Cape York Peninsula on the extreme north is the only other remarkable feature in the outline. In Year Book No. 1, an enumeration of the features of the coast-line of Australia was given (*see pp. 60 to 68*).

(ii) *Coast-line*. The lengths of coast-line, exclusive of minor indentations, of each State and of the whole continent, and the area per mile of coast-line, are shown in the following table :—

AUSTRALIA—COAST-LINE AND AREA PER MILE THEREOF.

State.	Coast-line.	Area per Mile of Coast-line.	State.	Coast-line.	Area per Mile of Coast-line.
	Miles.	Sq. miles.		Miles.	Sq. miles.
New South Wales(a)	700	443	South Australia..	1,540	247
Victoria.. ..	680	129	Western Australia	4,350	224
Queensland ..	3,000	223	Continent (b) ..	11,310	261
Northern Territory	1,040	503	Tasmania ..	900	29

(a) Including Federal Capital Territory.

(b) Area 2,948,366 square miles.

For the entire Commonwealth of Australia this gives a coast-line of 12,210 miles and an average of 244 square miles for one mile of coast-line. According to Strelbitski, Europe has only 75 square miles of area to each mile of coast-line, and, according to recent figures, England and Wales have only one-third of this, viz., 25 square miles.

(iii) *Historical Significance of Coastal Names*. It is interesting to trace the voyages of some of the early navigators by the names bestowed by them on various coastal features—thus Dutch names are found on various points of the Western Australian coast, in Nuyts' Archipelago, in the Northern Territory, and in the Gulf of Carpentaria; Captain Cook can be followed along the coasts of New South Wales and Queensland; Flinders' track is easily recognized from Sydney southwards, as far as Cape Catastrophe,

by the numerous Lincolnshire names bestowed by him; and the French navigators of the end of the eighteenth and the beginning of the nineteenth century have left their names all along the Western Australian, South Australian and Tasmanian coasts.

5. Geographical Features of Australia.—In each of the earlier issues of this Year Book fairly complete information has been given concerning some special geographical element. The nature of this information and its position in the various Year Books can be readily ascertained on reference to the special index following the index to maps and graphs at the end of this work.

6. Fauna, Flora, Geology and Seismology of Australia.—Special articles dealing with these features have appeared in previous Year Books, but limits of space naturally preclude their repetition in each volume. As pointed out in 5 *supra*, however, the nature and position of these articles can be readily ascertained from the special index. A reference to Barisal Guns will be found in Vol. IX., p. 56.

§ 2. Climate and Meteorology of Australia.*

1. Introductory.—In Year Book No. 3, pp. 79, 80, some account was given of the history of Australian meteorology, including reference to the development of magnetic observations and the equipment for the determination of various climatological records. In Year Book No. 4, pp. 84 and 87, will be found a short sketch of the creation and organization of the Commonwealth Bureau of Meteorology, and a résumé of the subjects dealt with at the Meteorological Conference in 1907.

2. Meteorological Publications.—Reference to publications issued by the Central Meteorological Bureau will be found in Official Year Book No. 22, pp. 40, 41. The following publications have since been issued:—Volume of "Results of Rainfall Observations made in Western Australia," for all years of record to 1927; Map of Normal Meteorological Conditions in Australia affecting Aviation; a Paper "A Basis for Seasonal Forecasting", by H. A. Hunt; Bulletin No. 18, "Foreshadowing Monsoonal Rains in Northern Australia"; Bulletin No. 19, "Thunderstorms in Australia"; Bulletin No. 20, "Zones of Relative Physical Comfort in Australia"; a Paper on "Frost Risks and Frost-Forecasting"; Booklet containing Meteorological Data for certain Australian Localities; and a volume of "Results of Rainfall Observations made in Tasmania".

3. General Description of Australia.—A considerable portion (0.530) of three divisions of Australia is north of the tropic of Capricorn—that is to say, within the States of Queensland and Western Australia, and the Northern Territory; no less than 1,149,320 square miles belong to the tropical zone, and 1,020,720 to the temperate zone. The whole area of Australia within the temperate zone, however, is 1,825,261 square miles; thus the tropical part is about 0.386, or about five-thirteenths of the whole, or the "temperate" region is half as large again as the "tropical" (more accurately 1.588). By reason of its insular geographical position, and the absence of striking physical features, Australia is, on the whole, less subject to extremes of weather than are regions of similar area in other parts of the globe, and latitude for latitude Australia is, on the whole, more temperate.

The altitudes of the surface of Australia range up to a little over 7,300 feet, hence its climate embraces a great many features, from the characteristically tropical to what is essentially alpine, a fact indicated in some measure by the name Australian Alps given to the southern portion of the great Dividing Range.

On the coast, the rainfall is often abundant and the atmosphere moist, but in some portions of the interior it is very limited, and the atmosphere dry. The distribution of forest, therefore, with its climatic influence, is very uneven. In the interior, in places, there are fine belts of trees, but there are large areas also which are treeless, and where the air is hot and parching in summer. Again, on the coast, even so far south as latitude 35°, the vegetation is tropical in its luxuriance, and to some extent also in character. Climatologically, therefore, Australia may be said to present a great variety of features.

* Prepared from data supplied by the Commonwealth Meteorologist, W. S. Watt, Esquire.

4. Meteorological Divisions.—(i) *General*. Reference to the divisions adopted by the Commonwealth Meteorologist will be found in Official Year Book No. 22, p. 41.

(ii) *Special Climatological Stations*. The latitudes, longitudes and altitudes of special stations, the climatological features of which are graphically represented hereinafter, are as follows:—

SPECIAL CLIMATOLOGICAL STATIONS—AUSTRALIA.

Locality.	Height above Sea Level.	Latitude. S.	Longitude. E.	Locality.	Height above Sea Level.	Latitude. S.	Longitude E.
	Feet.	deg. min.	deg. min.		Feet.	deg. min.	deg. min.
Perth ..	197	31 57	115 50	Canberra ..	1,920	35 20	149 15
Adelaide ..	140	34 56	138 35	Darwin ..	97	12 28	130 51
Brisbane ..	137	27 28	153 2	Alice Springs	1,926	23 38	133 37
Sydney ..	138	33 52	151 12	Dubbo ..	870	32 18	148 35
Melbourne ..	115	37 49	144 58	Laverton, W.A.	1,530	28 40	122 23
Hobart ..	177	42 53	147 20	Coolgardie ..	1,389	30 57	121 10

5. Temperatures.—(i) *Comparisons with other Countries*. In respect of Australian temperatures generally, it may be pointed out that the mean annual isotherm for 70° Fahrenheit extends in South America and South Africa as far south as latitude 33°, while in Australia it reaches only as far south as latitude 30°, thus showing that, on the whole, Australia has latitude a more temperate climate than other places in the Southern Hemisphere.

The comparison is even more favourable when the Northern Hemisphere is included, for in the United States the 70° isotherm extends in several of the western States as far north as latitude 41°. In Europe, the same isotherm reaches almost to the southern shores of Spain, passing, however, afterwards along the northern shores of Africa till it reaches the Red Sea, when it bends northward along the eastern shore of the Mediterranean till it reaches Syria. In Asia, nearly the whole of the land area south of latitude 40° N. has a higher temperature than 70°.

The extreme range of temperature is less than 100° over practically the whole of Australia, that figure being only slightly exceeded at a very few places; it is mostly 70° to 90° over inland areas, and somewhat less on the coast. In parts of Asia and North America, the extreme range exceeds 130° and 150° in some localities.

Along the northern shores of Australia the temperatures are very equable. At Darwin, for example, the difference in the means for the hottest and coldest months is only 8.5°, and the extreme readings for the year, or the highest maximum on record and the lowest minimum, show a difference of under 50°.

(ii) *Hottest and Coldest Parts*. A comparison of the temperatures recorded at coast and inland stations shows that, in Australia, as in other continents, the range increases with increasing distance from the coast.

In the interior of Australia, and during exceptionally dry summers, the temperature occasionally reaches or exceeds 120° in the shade, and during the dry winters the major portion of the country to the south of the tropics is subject to ground frosts. The hottest area of the continent is situated in the northern part of Western Australia about the Marble Bar and Nullagine goldfields, where the maximum shade temperature during the summer sometimes exceeds 100° continuously for days and weeks. The coldest part of Australia is the extreme south-east of New South Wales and extreme east of Victoria—the region of the Australian Alps. Here the temperature seldom, if ever, reaches 100° even in the hottest of seasons, while in winter, readings slightly below zero are occasionally recorded.

Tasmania as a whole enjoys a most moderate and equable range of temperature throughout the year, although occasionally hot winds may cross the Straits and cause the temperature to rise to 100° in the low-lying parts.

(iii) *Monthly Maximum and Minimum Temperatures.* The normal monthly maximum and minimum temperatures can be best shown by means of graphs, which exhibit the nature of the fluctuation of each for all available years. In the diagram herein for nine representative places in Australia, the upper heavy curves show the mean maximum, and the lower heavy curves the mean minimum temperatures based upon daily observations, while the other curves show the humidities.

6. *Humidity.*—After temperature, humidity is the most important element of climate, as regards its effect on human comfort, rainfall supply, and in connexion with engineering problems.

In this publication the *absolute humidity* has been graphically represented in inches of vapour pressure (i.e., that portion of the barometric pressure due to vapour). It is this total quantity of moisture in the air which affects personal comfort, plays an important part in varying the density of the atmosphere, and in heating and refrigerating processes. The more commonly quoted value, called the *relative humidity*, refers to the ratio which the actual moisture contents of the air bear to the total amount possible if saturation existed at the given temperature, and is usually quoted as a percentage. The relative humidity is an important factor in all drying operations, but is much less important than the absolute humidity as affecting animal life.

The mean monthly vapour pressure has also been added to the tables of climatological data for the capital cities included herein.

The normal monthly values of vapour pressure, it should be noted, combine to make the annual curve for this element which is comparable with the maximum and minimum temperature curves, but the relative humidities consisting as they do of the extremes for each month, do not show the normal annual fluctuation which would be approximately midway between the extremes.

The order of stations in descending values of vapour pressure is Darwin, Brisbane, Sydney, Perth, Melbourne, Adelaide, Canberra, Hobart and Alice Springs, while the relative humidity diminishes in the order, Sydney, Canberra, Darwin, Melbourne, Brisbane, Hobart, Perth, Adelaide and Alice Springs.

7. *Evaporation.*—(i) *General.* The rate and quantity of evaporation in any territory is influenced by the prevailing temperature, and by atmospheric humidity, pressure and movement. In Australia, the question is of perhaps more than ordinary importance, since in its drier regions water has often to be conserved in "tanks"* and dams. The magnitude of the economic loss by evaporation will be appreciated from the tabular records herein, which show that the yearly amount varies from about 31 inches at Hobart to more than 100 inches in the Central parts of Australia. Over the inland districts of the continent it has been calculated that evaporation equals the rainfall where the annual totals are about 36 inches, the variations above and below this quantity being inverse.

(ii) *Monthly Evaporation Curves.* The diagrams herein showing the mean monthly evaporation in various parts of Australia disclose how characteristically different are the amounts for the several months in different localities.

(iii) *Loss by Evaporation.* In the interior of Australia the possible evaporation is greater than the actual rainfall. Since the loss by evaporation depends largely on the exposed area, tanks and dams so designed that the surface shall be a minimum are advantageous. Further, the more protected from the direct rays of the sun and from winds, by means of suitable tree planting, the less will be the loss by evaporation. These matters are naturally of more than ordinary concern in the drier districts of Australia.

8. *Rainfall.*—(i) *General.* The rainfall of any region is determined mainly by the direction and route of the prevailing winds, by the varying temperatures of the earth's surface over which they blow, and by its physiographical features.

Australia lies within the zones of the south-east trades and prevailing westerly winds. The southern limit of the south-east trade strikes the eastern shores at about 30° south latitude, and, with very few exceptions, the heaviest rains of the Australian

* In Australia, artificial storage ponds or reservoirs are called "tanks."

continent are precipitated along the Pacific slopes to the north of that latitude, the varying quantities being more or less regulated by the differences in elevation of the shores and of the chain of mountains upon which the rain-laden winds blow from the New South Wales northern border to Thursday Island. The converse effect is exemplified on the north-west coast of Western Australia, where the prevailing winds blowing from the interior of the continent instead of from the ocean, result in the lightest coastal rain in Australia.

The westerly winds, which skirt the southern shores, are responsible for the reliable, generally light to moderate rains enjoyed by the south-western portion of Western Australia, by the agricultural areas of South Australia, by a great part of Victoria, and by the whole of Tasmania.

(ii) *Distribution of Rainfall.* The average annual rainfall map of Australia herein shows that the heaviest yearly falls—over 50 inches—occur over the coastal region of the Northern Territory, over most of the Cape York Peninsular and coastal districts of Queensland, over many of the coastal areas of New South Wales, and the western parts of Tasmania. A great part of the interior of the continent, stretching from the far west of New South Wales and the south-west of Queensland to the vicinity of Shark Bay in Western Australia, has a very low average rainfall of less than 10 inches a year. Between these two regions of heavy and very low rainfall are the extensive areas which experience useful to good rains, and in the southern and eastern parts of which are found the best country and most of the population and primary production.

(iii) *Factors Determining Occurrence, Intensity and Seasonal Distribution of Rainfall.* Reference has already been made to the frequent rains occurring in the north-eastern coastal districts of Queensland with the prevailing south-east trade winds and to similar rains in the west of Tasmania with the prevailing westerly winds. Other rains in Australia are associated mainly with tropical and southern depressions.

The former chiefly affect the northern, eastern, and to some extent the central parts of the continent and operate in an irregular manner during the warmer half of the year, but principally from December to March. They vary considerably in activity and scope from year to year, occasionally developing into severe storms off the east and north-west coasts. Tropical rainstorms sometimes cover an enormous area, half of the continent on occasions receiving moderate to very heavy falls during a period of a few days. Rain is also experienced, with some regularity, with thunderstorms in tropical areas, specially near the coast. All these tropical rains, however, favour mostly the northern and eastern parts of the area referred to: the other parts further inland receive lighter, less frequent and less reliable rainfall. With the exception of districts near the east coast, where some rain falls in all seasons, the tropical parts of the continent receive useful rains only on rare occasions from May to September.

The southern depressions are most active in the winter—June to August—and early spring months. The rains associated with them are fairly reliable and frequent over Southern Australia and Tasmania, and provide during that period the principal factor in the successful growing of wheat. These depressions also operate with varying activity during the remainder of the year, but the accompanying rains are usually lighter. The southern rains favour chiefly the south-west of Western Australia, the agricultural districts of South Australia, Victoria, Tasmania and the southern parts of New South Wales. They sometimes extend into the drier regions of the interior, but only infrequently and with irregular rains.

The map showing mean monthly distribution of rainfall over Australia gives information on the amount and occurrence of rain in graphic form.

(iv) *Wettest and Driest Regions.* The wettest known part of Australia is on the north-east coast of Queensland, between Port Douglas and Cardwell, where three stations situated on, or adjacent to, the Johnstone and Russell Rivers have an average annual rainfall of between 142 and 165 inches. The maximum and minimum falls there are:—Goondi, 241.53 in 1894 and 67.88 inches in 1915, or a range of 173.65 inches; Innisfail, 211.24 in 1894 and 69.87 inches in 1902, or a range of 141.37 inches; Harvey Creek, 254.77 in 1921 and 80.47 inches in 1902, or a range of 174.30 inches.

On four occasions more than 200 inches have been recorded at Goondi, the last of these being in 1910, when 204.82 inches were registered. The record at this station covers a period of 50 years.

Harvey Creek, in the shorter period of 29 years, has four times exceeded 200 inches, the total for 1921 being 254.77 inches, and at the South Johnstone Sugar Experiment Station, where a gauge was established seventeen years ago, 202.52 inches were recorded in 1921.

In Tasmania the wettest part is in the West Coast region, the mean annual rainfall at Lake Margaret being 145.25 inches, with a maximum of 175.12 inches in 1924.

The driest known part of the continent is in the Lake Eyre district in South Australia (the only part of the continent below sea level), where the annual average is only 5 inches, and where the fall rarely exceeds 10 inches for the twelve months.

The inland districts of Western Australia were at one time regarded as the driest part of Australia, but authentic observations in recent years over settled districts in the east of that State show that the annual average is from 10 to 12 inches.

(v) *Quantities and Distribution of Rainfall.* The general distribution is best seen from the rainfall map herein, which shows the areas subject to average annual rainfalls lying between certain limits. The areas enjoying varying quantities of rainfall determined from the latest available information are shown in the following table:—

AVERAGE ANNUAL RAINFALL DISTRIBUTION.

Average Annual Rainfall.	N.S.W. (a)	Victoria.	Queens- land.	South Australia	Northern Territory	Western Australia.	Tas- mania. (b)	Total. (c)
	sqr. mls.	sqr. mls.	sqr. mls.	sqr. mls.	sqr. mls.	sqr. mls.	sqr. mls.	sqr. mls.
Under 10 inches	48,749	nil	80,496	310,660	140,500	486,952	nil	1,067,357
10—15 "	78,454	19,270	81,549	36,460	132,780	255,092	nil	603,605
15—20 "	55,762	13,492	111,833	19,940	63,026	94,101	304	358,458
20—25 "	45,140	14,170	143,610	8,620	49,157	44,340	3,844	308,881
25—30 "	30,539	15,579	99,895	3,258	41,608	31,990	3,016	225,885
30—40 "	33,557	14,450	61,963	1,036	37,642	59,520	5,027	213,195
Over 40 "	18,171	10,923	91,154	96	58,907	3,925	11,247	194,423
Total area ..	310,372	87,884	670,500	380,070	523,620	975,920	23,438	2,971,804

(a) Including Federal Capital Territory. (b) Over an area of 2,777 square miles no records are available.

Referring first to the capital cities the records of which are given in the next table, it will be seen that Sydney, with a normal rainfall of 47.48 inches, occupies the chief place; Brisbane, Perth, Melbourne, Hobart, Canberra and Adelaide follow in that order, Adelaide with 21.15 inches being the driest. The extreme range from the wettest to the driest year is greatest at Brisbane (72.09 inches) and least at Adelaide (19.48 inches).

In order to show how the rainfall is distributed throughout the year in various parts of the continent, the figures for representative towns have been selected. (See map.) The figures for Darwin, typical of the Northern Territory, show that nearly the whole of the rainfall occurs there in the summer months, while little or none falls in the middle of the year. The figures for Perth, as representing the south-western part of the continent, are the reverse, for while the summer months are dry, the winter ones are very wet. In Melbourne and Hobart the rain is fairly well distributed throughout the twelve months, with a maximum in October for the former, and in November for the latter. The records at Alice Springs and Daly Waters indicate that in the central parts of Australia most of the rain occurs from November to March. In Queensland, the heaviest rains fall in the summer months, but good averages are also maintained during the other seasons in eastern parts.

On the coast of New South Wales, the first six months of the year are the wettest, with a maximum in the autumn; the averages during the last six months are fair, and moderately uniform. Generally it may be said that approximately one-third of the

area of the continent, principally in the eastern and northern parts, enjoys an annual average rainfall of from 20 to 50 or more inches, the remaining two-thirds averaging from 5 to 20 inches.

(vi) *Curves of Rainfall and Evaporation.* The relative amounts of rainfall and evaporation at different times through the year are clearly indicated in the graphs herein. Inspection thereof will show how large is the evaporation when water is fully exposed to the direct rays of the sun and to wind.

(vii) *Tables of Rainfall.* The table of rainfall for a long period of years for each of the various Australian capitals affords information as to the variability of the fall in successive years, and the list of the more remarkable falls furnishes information as to what may be expected on particular occasions.

RAINFALL—AUSTRALIAN CAPITAL CITIES.

Year.	CANBERRA.(a)		PERTH.		ADELAIDE.		BRISBANE.		SYDNEY.		MELBOURNE.		HOBART.	
	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.
	in.		in.		in.		in.		in.		in.		in.	
1902 ..	..	..	27.06	93	16.02	123	16.17	87	43.07	180	23.08	102	21.85	150
3 ..	..	..	35.69	140	25.47	134	49.27	136	38.62	173	28.43	130	25.86	139
4 ..	..	..	34.35	125	20.31	117	33.23	124	45.93	158	29.72	128	22.41	139
5 ..	..	..	34.61	116	22.28	131	36.76	108	35.03	145	25.64	129	32.09	168
6 ..	..	..	32.37	121	26.51	127	42.85	125	31.89	160	22.29	114	23.31	155
7 ..	..	..	40.12	132	17.78	125	31.46	119	31.32	132	22.26	102	25.92	166
8 ..	..	..	30.52	106	24.56	125	44.01	125	45.65	167	17.72	130	16.50	148
9 ..	..	..	39.11	107	27.69	138	34.06	111	32.45	177	25.86	171	27.29	170
1910 ..	..	..	37.02	135	24.62	116	49.00	133	46.91	160	24.61	167	25.22	205
11 ..	..	..	23.38	108	15.99	127	35.21	128	50.24	155	36.61	168	26.78	193
12 ..	19.27	76	27.83	123	19.57	116	41.30	114	47.51	172	20.37	157	23.14	181
13 ..	16.38	71	38.28	141	18.16	102	48.81	115	57.70	141	21.17	157	19.36	168
14 ..	18.49	81	20.21	128	11.39	91	33.99	141	56.42	149	18.57	129	15.42	184
15 ..	22.31	87	43.61	164	19.38	117	28.60	93	34.83	117	20.05	127	20.91	106
16 ..	31.26	119	35.16	128	28.16	142	52.80	136	44.91	161	38.04	170	43.30	203
17 ..	29.70	144	45.64	146	28.90	153	40.92	127	52.40	151	30.57	171	38.62	214
18 ..	18.27	95	39.58	138	17.41	107	24.05	121	42.99	149	27.13	160	26.04	179
19 ..	16.31	85	30.66	120	17.21	108	19.36	96	58.71	152	24.89	147	22.48	159
20 ..	29.30	107	40.35	124	26.70	119	39.72	122	43.42	159	28.27	162	18.00	182
21 ..	..	..	41.09	135	22.64	100	54.31	167	43.34	140	29.76	154	18.04	150
22 ..	..	..	31.86	135	23.20	117	35.82	100	30.35	130	25.02	151	28.27	189
23 ..	..	..	44.47	134	29.79	139	23.27	93	37.01	123	22.64	158	32.93	196
24 ..	35.95	68	33.79	110	23.44	143	41.08	114	37.01	136	36.48	171	28.76	197
25 ..	33.71	59	31.41	126	21.91	118	53.10	139	50.35	145	17.57	144	22.40	171
26 ..	20.53	97	49.22	167	22.20	116	30.82	111	37.07	127	20.81	140	25.79	187
27 ..	21.40	83	36.59	133	16.92	101	62.08	130	43.56	135	17.98	135	20.04	183
28 ..	17.82	96	44.88	140	19.43	107	52.64	145	40.07	130	24.09	151	30.23	205
29 ..	22.34	88	36.77	172	17.51	110	39.78	118	57.90	120	28.81	168	26.58	194
30 ..	16.52	86	39.80	129	18.65	116	41.22	144	44.47	141	25.41	145	19.38	152
31 ..	24.25	105	39.18	118	22.26	146	66.72	136	40.22	153	28.63	164	27.17	179
32 ..	19.13	107	30.40	107	25.04	141	24.79	97	37.47	140	31.08	179	30.29	155
33 ..	20.30	88	32.47	116	22.12	130	40.71	118	42.71	153	22.28	136	23.16	173
34 ..	35.89	118	40.01	120	20.24	125	54.26	117	64.91	183	33.53	157	23.17	194
35 ..	24.40	102	32.28	129	23.45	140	34.64	111	30.97	131	29.98	183	32.22	166
36 ..	29.49	121	30.64	118	19.34	121	21.77	101	30.22	130	24.30	187	19.60	178
Average	23.32	95	34.81	121	21.15	123	44.88	127	47.48	152	26.19	140	24.01	153
No. of Years	22	22	61	61	98	98	87	77	97	97	93	81	94	93

(a) Records commenced in 1912; are not available for the years 1921 to 1923.

NOTE.—The above average rainfall figures for Brisbane, Sydney and Melbourne differ slightly from the mean annual falls given in the Climatological Tables and on page 54, which are for a less number of years. Annual totals from 1860 to 1901 inclusive will be found in Official Year Book No. 15, page 53.

9. Remarkable Falls of Rain.—The following are the most remarkable falls of rain in the various States and in the Northern Territory which have occurred within a period of twenty-four hours. For other very heavy falls at various localities reference may be made to Official Year Book No. 14, pp. 60 to 64 and No. 22, pp. 46 to 48 :—

HEAVY RAINFALLS—NEW SOUTH WALES, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Broger's Creek ..	14 Feb., 1898	20.05	South Head (near		
" ..	13 Jan., 1911	20.83	Sydney) ..	16 Oct., 1844	20.41
Cordeaux River ..	14 Feb., 1898	22.58	Towamba ..	5 Mar., 1893	20.00
Morpeth ..	9 Mar., 1893	21.52	Viaduct Creek ..	15 Mar., 1936	20.00

HEAVY RAINFALLS—QUEENSLAND, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Babinda (Cairns) ..	2 Mar., 1935	24.14	Mackay ..	21 Jan., 1918a	24.70
Buderim Mountain	11 Jan., 1898	26.20	Macnade Mill ..	6 " 1901	23.33
Crohamhurst			Plane Creek		
(Blackall Range)	2 Feb., 1893	35.71	(Mackay) ..	26 Feb., 1913	27.73
Deeral ..	2 Mar., 1935	27.60	Port Douglas ..	1 Apr., 1911	31.53
Goondi ..	30 Jan., 1913	24.10	Tully ..	12 Feb., 1927	23.86
Harvey Creek ..	3 " 1911	27.75	Woodlands (Yepp'n)	31 Jan., 1893	23.07
Kuranda (Cairns) ..	2 Apr., 1911	28.80	Yarrabah ..	2 Apr., 1911	30.65

(a) 37½ hours.

HEAVY RAINFALLS—WESTERN AUSTRALIA, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Balla Balla ..	21 Mar., 1899	14.40	Pilbara ..	2 Apr., 1898	14.04
Boodarie ..	21 Jan., 1896	14.53	Roebuck Plains ..	6 Jan., 1917	22.36
Broome ..	6 " 1917	14.00	Thangoc ..	17-19 Feb., '96	24.18
Derby ..	7 Jan., 1917	16.47	Whim Creek ..	3 Apr., 1898	29.41
Fortescue ..	3 May, 1890	23.36	Winderrie ..	17 Jan., 1923	14.23

HEAVY RAINFALLS—NORTHERN TERRITORY, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Bathurst Island ..			Brock's Creek ..	24 Dec., 1915	14.33
Mission ..	7 Apr., 1925	11.85	Cape Don ..	13 Jan., 1934	13.58
Birrimbah ..	6 Mar., 1935	16.50	Darwin ..	7 Dec., 1915	11.07
Borroloola ..	14 Mar., 1899	14.00			

HEAVY RAINFALLS—SOUTH AUSTRALIA, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amount.
		ins.
Wilmington	28 Feb., 1921	3.97
	1 Mar., 1921	7.12

HEAVY RAINFALLS.—VICTORIA, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Apollo Bay ..	28 Mar., 1932	11.08	Mt. Buffalo ..	6 June, 1917	8.53
Cann River ..	27 Feb., 1919	9.56	Murrungowar ..	10 July, 1932	14.65
Hazel Park ..	1 Dec., 1934	10.50	Olinda ..	1 Dec., 1934	9.10
Kalorama ..	1 " "	10.05	Tambo Crossing ..	13 July, 1923	8.89
Korumburra ..	1 " "	8.51	Tonghi Creek ..	27 Feb., 1919	9.90

HEAVY RAINFALLS—TASMANIA, UP TO 1936, INCLUSIVE.

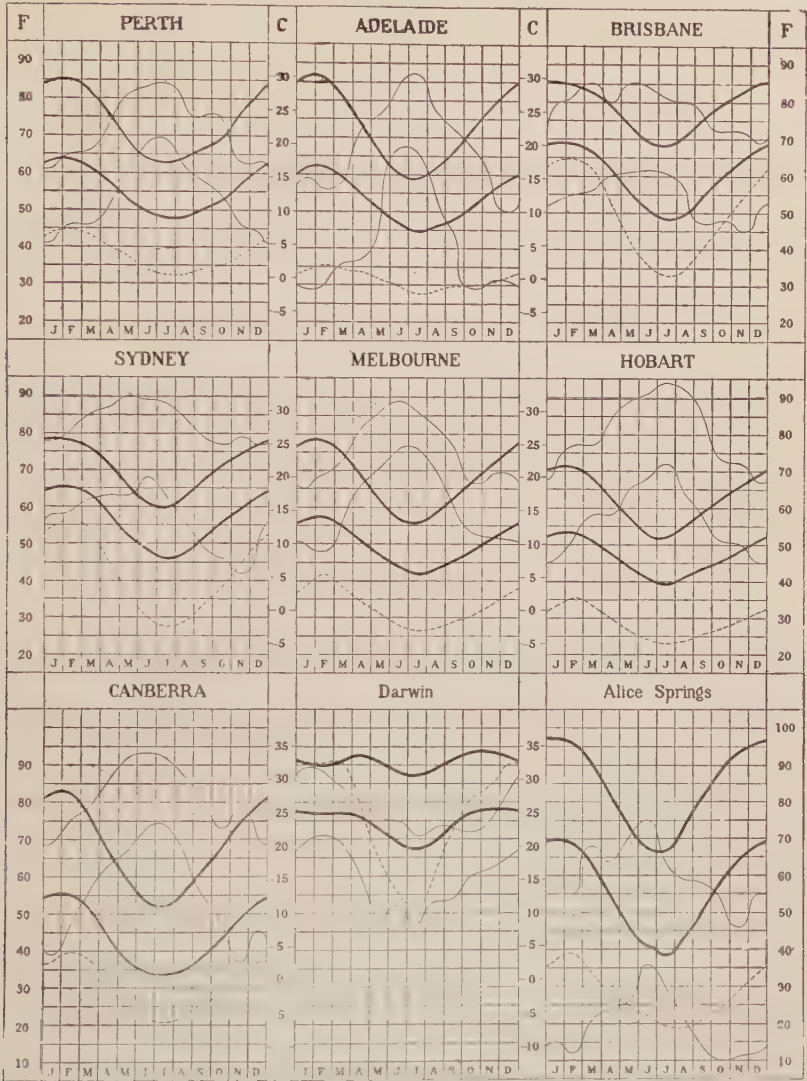
Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Cullenswood ..	5 Apr., 1929	11.12	Riana ..	5 Apr., 1929	11.08
Gould's Country ..	8-10 Mar., '11	15.33	The Springs ..	30-31 Jan., '16	10.75
Lottah ..	8-10 Mar., '11	18.10	Triabunna ..	5 June, 1923	10.20
Mathinna ..	5 Apr., 1929	13.25			

HEAVY RAINFALLS—FEDERAL CAPITAL TERRITORY, UP TO 1936, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
		ins.			ins.
Canberra ..	27 May, 1925	6.84	Uriarra ..	27 May, 1925	6.57
Cotter Junction ..	" "	7.13			

10. **Snowfall.**—Light snow has been known to fall occasionally as far north as latitude 31° S., and from the western to the eastern shores of the continent. During exceptional seasons, it has fallen simultaneously over two-thirds of the State of New South Wales, and has extended at times along the whole of the Great Dividing Range, from its southern extremity in Victoria as far north as Tallowomba in Queensland. During the winter, for several months, snow covers the ground to a great extent on the Australian Alps, where also the temperature falls below zero Fahrenheit during the night. In the ravines around Kosciusko and similar localities the snow never entirely disappears.

ANNUAL FLUCTUATIONS OF NORMAL MAXIMUM AND MINIMUM TEMPERATURE AND HUMIDITY.



EXPLANATION.—The upper and lower heavy lines in each graph represent the mean maximum and mean minimum temperatures respectively. The Fahrenheit temperature scales are shown on the outer edge of the sheet under "F" and the centigrade scales in the two inner columns under "C."

The broken line shows the normal absolute humidity in the form of g a.m. vapour pressures for which the figures in the outer "F" columns represent hundredths of an inch of barometric pressure.

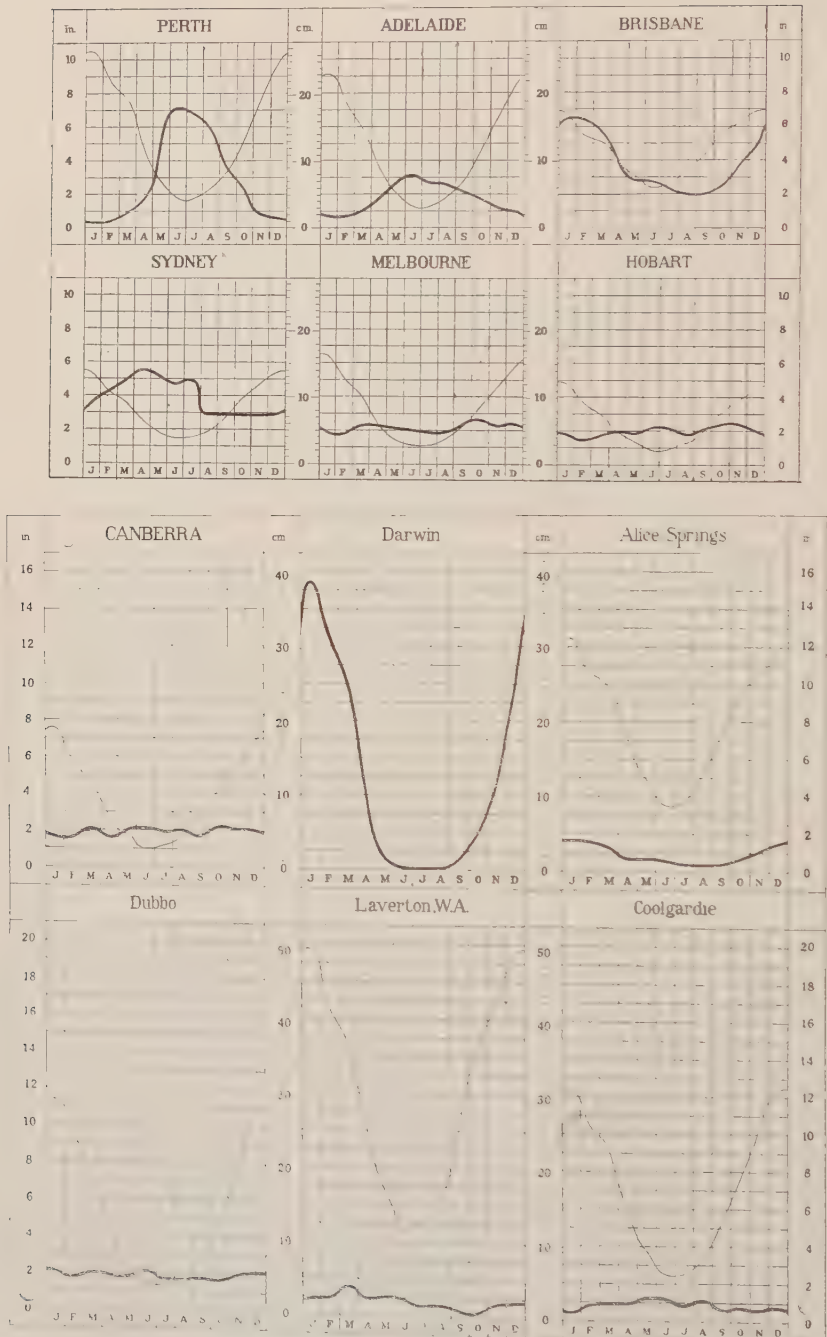
The upper and lower fine lines join the greatest and the least monthly means of relative humidity respectively, the figures under the outer columns "F" indicating percentage values.

The curves for temperature and vapour pressure joining the mean monthly values serve to show the annual fluctuation of these elements, but the relative humidity graphs joining the extreme values for each month do not indicate any normal annual variation.

Comparison of the maximum and minimum temperature curves affords a measure of the mean diurnal range of temperature. At Perth in the middle of January, for instance, there is normally a range of 21° from 63° F. to 84° F., but in July it is only 15° from 48° F. to 63° F.

The relative humidity curves illustrate the extreme range of the mean monthly humidity over a number of years.

MEAN MONTHLY RAINFALL AND EVAPORATION.



EXPLANATION.—On the preceding graphs thick lines denote rainfall, and thin lines evaporation, and show the fluctuation of the mean rate of fall or evaporation *per month* throughout the year. The results, plotted from the Climatological Tables herein, are shown in inches (see the outer columns), and the corresponding metric scale (centimetres) is shown in the two inner columns. The evaporation is not given for Darwin.

At Perth, Adelaide, Brisbane, Melbourne, Hobart, Canberra, Alice Springs, and Coolgardie the results have been obtained from jacketed tanks sunk in the ground. At Sydney and Dubbo sunken tanks without water jackets are used, whilst at Laverton (W.A.) the records are taken from a small portable jacket evaporation dish of 8 inches in diameter.

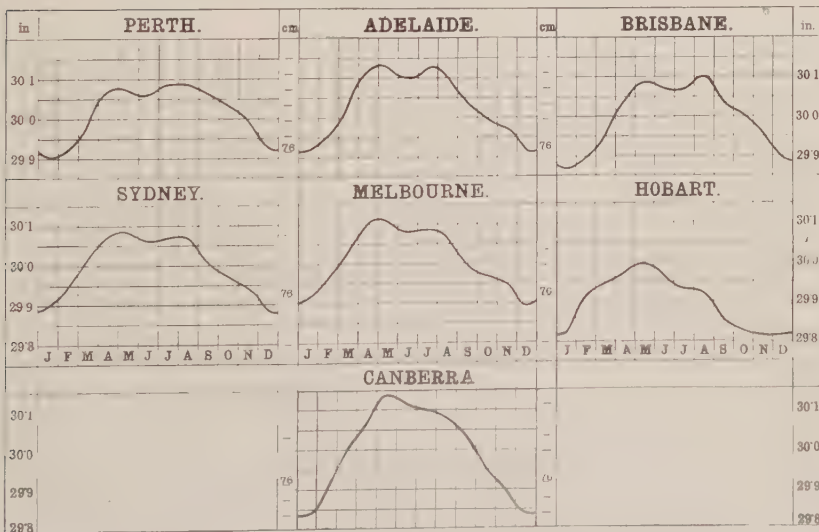
The distance for any date from the zero line to the curve represents the average number of inches, reckoned as per month, of rainfall at that date. Thus, taking the curve for Adelaide in the middle of January, the rain falls on the average at the rate of about three-fourths of an inch per month or, say, at the rate of about 9 inches per year. In the middle of June it falls at the rate of a little over 3 inches per month, or, say, at the rate of about 37 inches per year. At Dubbo, the evaporation is at the rate of nearly $11\frac{1}{2}$ inches per month about the middle of January, and only about $1\frac{1}{2}$ inches at the middle of June.

The mean annual rainfall and evaporation at the places indicated are given in the appended table

MEAN ANNUAL RAINFALL AND EVAPORATION.

Place.	Rainfall.	Evapora- tion.	Place.	Rainfall.	Evapora- tion.
	In.	In.		In.	In.
Perth ..	34.81	66.28	Canberra ..	23.32	45.03
Adelaide ..	21.15	55.23	Darwin ..	59.51	—
Brisbane ..	45.04	56.16	Alice Springs ..	10.53	96.66
Sydney ..	47.10	39.39	Dubbo ..	22.04	66.37
Melbourne ..	25.70	39.05	Laverton, W.A.	9.23	145.19
Hobart ..	24.01	31.18	Coolgardie ..	10.14	85.37

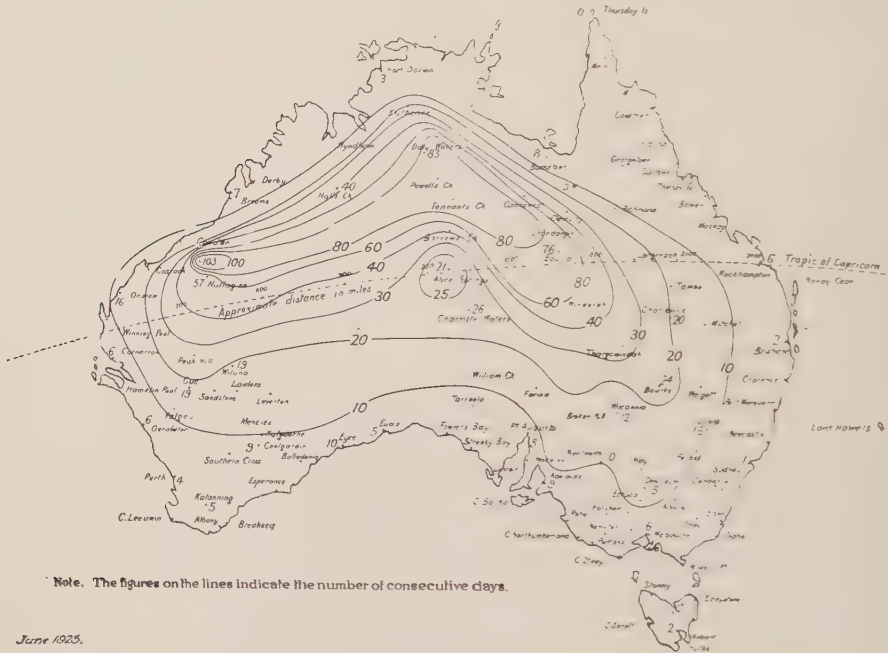
MEAN BAROMETRIC PRESSURE.—CAPITAL CITIES.



EXPLANATION.—The lines representing the yearly fluctuations of barometric pressure at the State capital cities are means for long periods, and are plotted from the Climatological Tables herein. The pressures are shown in inches on about $2\frac{1}{2}$ times the natural scale, and the corresponding pressures in centimetres are also shown in the two inner columns, in which each division represents one millimetre.

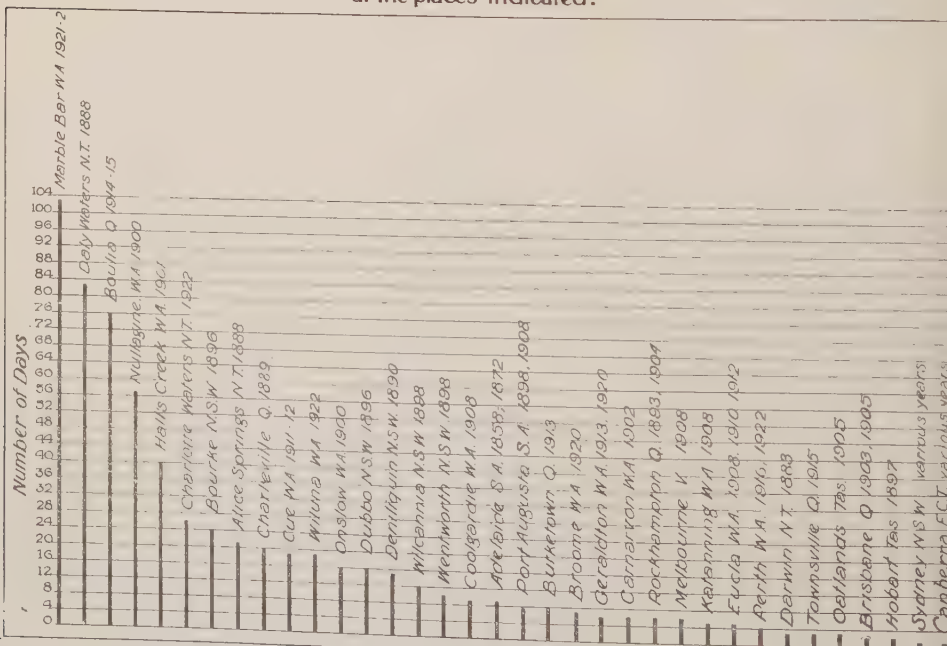
Taking the Brisbane graph for purposes of illustration, it will be seen that the mean pressure in the middle of January is about 29.87 inches, and there are maxima in the middle of May and August of about 30.09 inches.

Area affected and period of duration of the Longest Heat Waves when the Maximum Temperature for consecutive 24 hours reached or exceeded 100° Fah.



June 1925.

Greatest number of consecutive days on which the Shade Temperature was over 100° Fah. at the places indicated.



COMMONWEALTH OF AUSTRALIA.
BUREAU OF METEOROLOGY,
MELBOURNE.

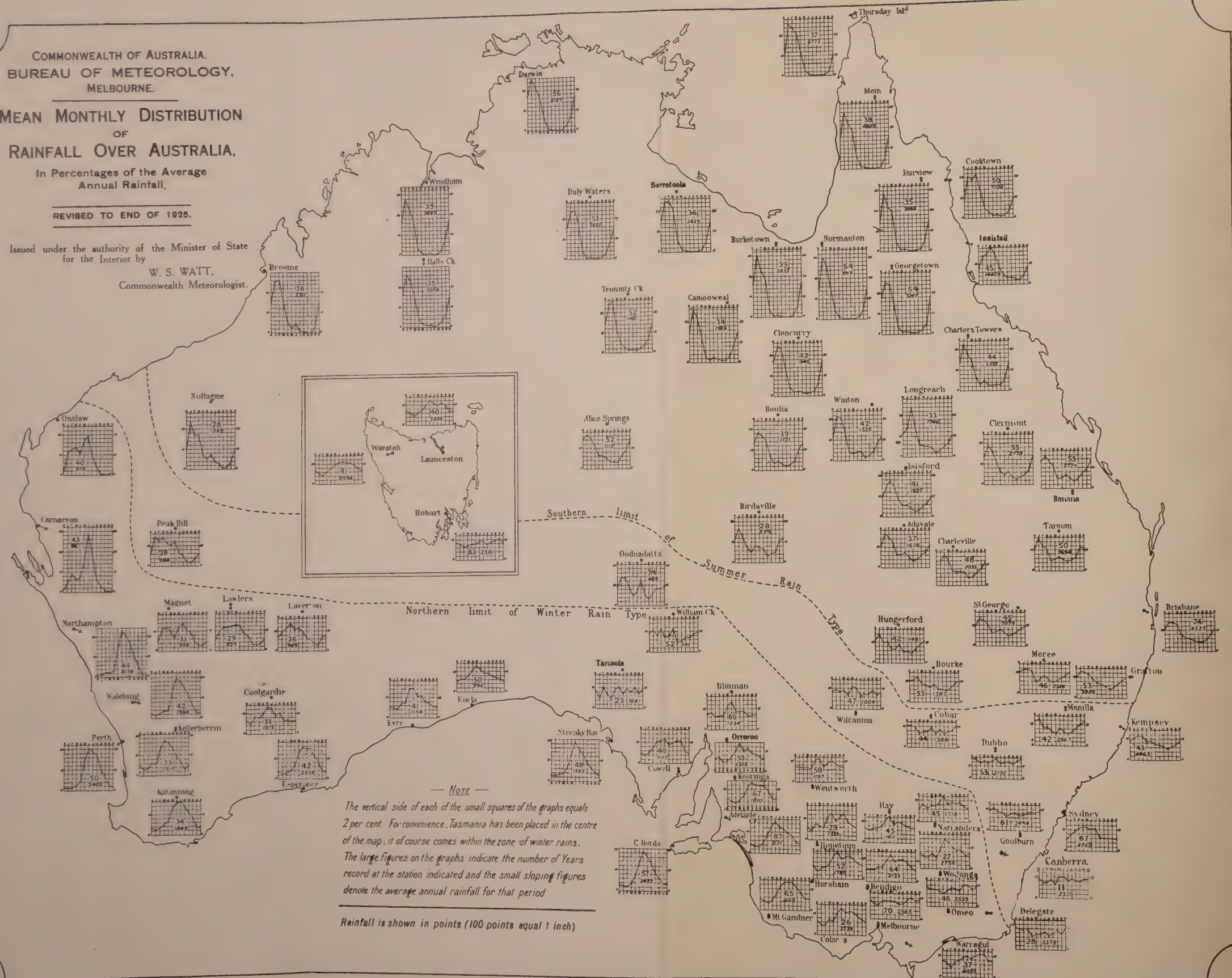
MEAN MONTHLY DISTRIBUTION OF RAINFALL OVER AUSTRALIA.

In Percentages of the Average
Annual Rainfall.

REVISED TO END OF 1925.

Issued under the authority of the Minister of State
for the Interior by

W. S. WATT,
Commonwealth Meteorologist.



11. Hail.—Hail falls most frequently along the southern shores of the continent in the winter, and over eastern Australia during the summer months. The size of the hailstones generally increases with distance from the coast. A summer rarely passes without some station experiencing a fall of stones exceeding in size an ordinary hen-egg, and many riddled sheets of light-gauge galvanized iron bear evidence of the weight and penetrating power of the stones.

The hailstones occur most frequently when the barometric readings indicate a flat and unstable condition of pressure. They are almost invariably associated with tornadoes or tornadic tendencies, and on the east coast the clouds from which the stones fall are generally of a remarkable sepia-coloured tint.

12. Barometric Pressures.—The mean annual barometric pressure (corrected to sea-level and standard gravity) in Australia varies from 29.80 inches on the north coast to 29.92 inches over the central and 30.03 inches in the southern parts of the continent. In January, the mean pressure ranges from 29.70 inches in the northern and central areas to 29.95 inches in the southern. The July mean pressure ranges from 29.90 inches at Darwin to 30.11 inches at Alice Springs. Barometer readings corrected to mean sea-level and standard gravity have, under anticyclonic conditions in the interior of the continent, ranged as high as 30.78 inches (at Kalgoorlie on the 28th July, 1901) and have fallen as low as 27.55 inches. This lowest record was registered at Mackay during a tropical hurricane on the 21st January, 1918. An almost equally abnormal reading of 27.88 inches was recorded at Innisfail during a similar storm on the 10th March, 1918. The mean barometric pressure for the capitals of Australia is shown on the graphs herein.

13. Wind.—(i) *Trade Winds.* The two distinctive wind currents in Australia are as previously stated, the south-east and westerly trade winds. As the belt of the earth's atmosphere in which they blow apparently follows the sun's ecliptic path north and south of the equator, so the area of the continent affected by these winds varies at different seasons of the year. During the summer months the anticyclonic belt travels in very high latitudes, thereby bringing the south-east trade winds as far south as 30° south latitude. The westerly trade winds retreat a considerable distance to the south of Australia, and are rarely in evidence in the hot months. When the sun passes to the north of the equator, the south-east trade winds follow it, and only operate to the north of the tropics for the greater part of the winter. The westerly winds come into lower latitudes during the same period of the year. They sweep across the southern areas of the continent from the Leeuwin to Cape Howe, and during some seasons are remarkably persistent and strong, and occasionally penetrate to almost tropical latitudes.

(ii) *Land and Sea Breezes.* The prevailing winds second in order of importance are the land and sea breezes. On the east coast the sea breezes which come in from the north-east, when in full force, frequently reach the velocity of a gale during the afternoon in the summer months, the maximum hourly velocity, ordinarily attained about 3 p.m., not infrequently attaining a rate of 35 to 40 miles per hour. This wind, although strong, is usually shallow in depth, and does not ordinarily penetrate more than 9 or 12 miles inland.

The land breezes on the east coast blow out from a westerly direction during the night.

On the western shores of the continent the directions are reversed. The sea breezes come in from the south-west, and the land breezes blow out from the north-east.

(iii) *Inland Winds.* Inland, the direction of the prevailing winds is largely regulated by the seasonal changes of pressure, so disposed as to cause the winds to radiate spirally outward from the centre of the continent during the winter months, and to circulate spirally from the seaboard to the centre of Australia during the summer months.

(iv) *Prevailing Direction at the Capital Cities.* In Canberra, the winds are mainly from easterly and north-easterly directions, the former predominating to a somewhat greater degree in the mornings, the latter in the afternoons and in the colder half of the year.

In Perth, southerly (south-west to south-east) is the prevailing direction for August to April inclusive and north-north-west to north-north-east for the midwinter months.

In Adelaide the summer winds are from the south-west and south, and in the winter from north-east to north.

In Brisbane, south-east winds are in evidence all the year round, but more especially from January to April.

In Sydney from May to September the prevailing direction is westerly, and for the remaining seven months north-easterly.

Melbourne winter winds are from north-west to north-east, and those of the summer from south-west to south-east.

At Hobart the prevailing direction for the year is from north-west.

Over the greater part of Australia, January is the most windy month, i.e., is the month when the winds are strongest on the average, though the most violent wind storms occur at other times during the year, the time varying with the latitude.

14. *Cyclones and Storms.*—The “elements” in Australia are ordinarily peaceful, and while destructive cyclones have visited various parts, more especially coastal areas, such visitations are rare, and may be properly described as erratic.

During the winter months, the southern shores of the continent are subject to cyclonic storms, evolved from the V-shaped depressions of the southern low-pressure belt. They are felt most severely over the south-western parts of Western Australia, to the south-east of South Australia, in Bass Strait, including the coast-line of Victoria, and on the west coast of Tasmania. Apparently the more violent wind pressures from these cyclones are experienced in their northern half, or in that part of them which has a north-westerly to a south-westerly circulation.

The north-east coast of Queensland is occasionally visited by hurricanes from the north-east tropics. During the first four months of the year, these hurricanes appear to have their origin in the neighbourhood of the South Pacific Islands, their path being a parabolic curve first to the S.W. and finally towards the S.E. Only a small percentage, however, reach Australia, the majority recurving in their path to the east of New Caledonia.

Very severe cyclones, locally known as “willy willies,” are peculiar to the north-west coast of Western Australia from the months of November to April, inclusive. They apparently originate in the ocean in the vicinity of Cambridge Gulf, and travel in a south-westerly direction with continually increasing force, displaying their greatest energy near Cossack and Onslow, between latitudes 20° and 22° South. The winds in these storms, like those from the north-east tropics, are very violent and destructive, and cause great havoc amongst the pearl-fishers. The greatest velocities are usually to be found in the south-eastern quadrant of the cyclones, with north-east to east winds. After leaving the north-west coast, these storms either travel southwards, following the coast-line, or cross the continent to the Great Australian Bight. When they take the latter course, their track is marked by torrential rains, as much as 29.41 inches, for example, being recorded in 24 hours at Whim Creek from one such occurrence. Falls of 10 inches and over have frequently been recorded in the northern interior of Western Australia from similar storms.

Some further notes on severe cyclones and on "southerly bursters," a characteristic feature of the eastern part of Australia, will be found in previous issues of the Official Year Book (*see* No. 6, pp. 84, 85, 86).

A special article dealing with "Australian Hurricanes and Related Storms" appeared in Official Year Book No. 16, pp. 80-84.

15. Influences affecting Australian Climate.—(i) *General.* Australian history does not cover a sufficient period, nor is the country sufficiently occupied, to ascertain whether or not the advance of settlement has materially affected the climate as a whole. Local changes have, however, taken place, a fact which suggests that settlement and the treatment of the land have a distinct effect on local conditions. For example, the mean temperature of Sydney shows a rise of two tenths of a degree during the last twenty years, a change probably brought about by the great increase of residential and manufacturing buildings within the city and in the surrounding suburbs. Again, low-lying lands on the north coast of New South Wales, which originally were seldom subject to frosts, have, with the denudation of the surrounding hills from forests, experienced annual visitations, the probable explanation being that through the absence of trees the cold air of the high lands now flows unchecked and untempered down the sides of the hills to the valleys and lower lands.

(ii) *Influence of Forests on Climate.* As already indicated, forests doubtless exercise a great influence on local climate, and hence, to the extent that forestal undertakings will allow, the weather can be controlled by human agency. The direct action of forests is an equalizing one; thus, especially in equatorial regions, and during the warmest portion of the year, they considerably reduce the mean temperature of the air. They also reduce the diurnal extremes of shade temperatures by altering the extent of radiating surface by evaporation, and by checking the movement of air, and while decreasing evaporation from the ground, they increase the relative humidity. Vegetation greatly diminishes the rate of flow-off of rain and the washing away of surface soil, and when a region is protected by trees, a steadier water supply is ensured, and the rainfall is better conserved. In regions of snowfall, the supply of water to rivers is similarly regulated, and without this and the sheltering influence of ravines and "gullies," watercourses supplied mainly by melting snow would be subject to alternative periods of flooding and dryness. This is borne out in the case of the inland rivers, the River Murray, for example, which has never been known to become dry, deriving its steadiness of flow mainly through the causes indicated.

(iii) *Direct Influence of Forests on Rainfall.* Whether forests have a direct influence on rainfall is a debatable question, some authorities alleging that precipitation is undoubtedly induced by forests, while others take the opposite view.

Sufficient evidence exists, however, to prove that, even if the rainfall has not increased, the beneficial climatic effect of forest lands more than warrants their protection and extension. Rapid rate of evaporation, induced by both hot and cold winds, injures crops and makes life uncomfortable on the plains, and, while it may be doubted that the forest aids in increasing precipitation, it must be admitted that it does check winds and the rapid evaporation due to them. Trees as wind-breaks have been successfully planted in central parts of the United States, and there is no reason why similar experiments should not be successful in many parts of the treeless interior of Australia. The belts should be planted at right angles to the direction of the prevailing parching winds, and if not more than half a mile apart will afford shelter to the enclosed areas.

In previous issues some notes on observations made in other countries were added (*see* Official Year Book No. 6, pp. 86 and 95).

16. Rainfall and Temperatures, Various Cities.—The following table shows rainfall and temperature for various important cities throughout the world, for the Federal Capital, and for the capitals of the Australian States.

RAINFALL AND TEMPERATURES—VARIOUS CITIES.

Place.	Height above M.S.L.	Annual Rainfall.			Temperature.					
		Average.	Highest.	Lowest.	(a) Mean Summer.	(b) Mean Winter.	Highest on Record.	Lowest on Record.	Average Hottest Month.	Average Coldest Month.
		Ft.	Ins.	Ins.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.
Amsterdam (Gar- dens) ..	3	31.26	38.39	20.24	61.3	37.4	93.2	3.2	64.0	37.0
Auckland ..	160	44.88	74.15	26.32	65.8	52.3	85.0	35.0	66.6	51.6
Athens ..	351	15.48	33.33	4.56	79.2	49.1	100.4	19.6	81.0	47.4
Bergen ..	116	73.43	107.32	54.33	56.1	34.7	86.0	7.3	57.4	34.2
Berlin (Central) ..	161	22.72	30.04	14.25	64.8	31.0	98.6	— 14.4	66.0	31.8
Berne ..	1,877	36.30	58.23	24.69	62.2	30.1	91.4	— 3.6	64.4	28.0
Bombay ..	32	70.54	114.89	33.42	82.7	74.7	100.2	— 25.6	84.3	73.9
Breslau ..	410	22.60	32.51	15.91	64.2	30.9	99.9	— 4.4	63.7	34.5
Brussels ..	328	28.35	41.18	17.73	62.6	36.0	95.4	— 10.1	71.2	30.2
Budapest ..	425	24.06	37.05	16.81	69.3	32.2	101.7	— 22.3	71.8	50.0
Buenos Ayres ..	82	38.75	79.72	20.04	72.7	50.9	104.0	— 44.2	88.0	66.4
Calcutta ..	21	61.82	98.48	35.43	85.6	68.0	102.0	34.0	68.8	53.9
Capetown ..	40	25.50	30.72	17.71	68.1	54.7	87.8	43.2	69.2	60.7
Caracas ..	3,420	30.03	47.36	23.70	68.3	65.3	103.0	— 23.0	72.4	23.7
Chicago ..	823	33.28	45.86	24.52	70.0	26.1	95.7	— 21.3	61.6	42.7
Christchurch ..	22	25.21	35.30	13.54	60.8	43.5	95.0	— 13.4	63.1	24.4
Christiania (Oslo)	82	25.39	36.18	16.24	61.0	25.4	97.2	— 61.6	82.0	78.6
Colombo ..	24	88.53	123.96	53.56	81.6	78.7	103.6	13.0	75.7	42.0
Constantinople ..	245	28.75	42.74	14.78	74.0	43.5	91.4	— 13.0	62.6	31.8
Copenhagen ..	43	22.80	32.52	14.02	60.9	32.7	93.4	— 15.3	66.0	31.6
Dresden ..	115	24.22	34.42	11.73	64.6	33.2	97.0	13.0	64.0	42.5
Dublin (City) ..	54	27.66	35.56	16.60	59.1	42.8	87.0	23.0	58.0	42.5
Dunedin ..	300	36.02	54.51	21.86	57.3	43.5	94.0	41.1	70.7	63.8
Durban ..	200	40.79	71.27	27.24	55.0	39.0	90.0	0.0	57.3	35.7
Edinburgh (Leith)	441	25.21	32.05	16.44	64.0	33.4	100.0	— 13.5	65.8	31.8
Geneva ..	1,332	32.13	47.60	18.73	64.0	36.8	94.5	16.7	75.4	45.5
Genoa ..	157	51.29	108.22	28.21	73.8	39.5	84.9	6.6	58.3	39.3
Glasgow ..	139	38.49	56.18	29.05	57.0	39.5	100.0	4.0	63.0	40.1
Greenwich ..	149	23.50	35.54	16.38	61.7	40.4	97.0	32.0	82.0	58.8
Hong Kong ..	109	65.61	119.72	45.84	81.5	60.5	93.6	20.8	68.2	48.0
Johannesburg ..	5,750	31.63	50.00	21.66	65.4	34.4	96.4	— 16.6	64.8	30.0
Leipzig ..	394	24.69	31.37	17.10	63.9	31.6	89.6	— 30.3	63.7	15.2
Leningrad ..	16	21.30	29.52	13.75	61.1	17.4	102.9	29.3	71.1	51.8
Lisbon ..	313	26.07	52.82	16.34	70.0	52.9	94.0	9.0	62.3	39.1
London (Kew) ..	18	23.80	38.18	12.16	60.8	39.0	113.0	57.5	80.9	76.1
Madras ..	22	49.85	78.92	21.74	89.0	76.8	107.1	10.5	75.7	39.7
Madrid ..	2,149	22.23	27.48	9.13	73.0	41.2	101.5	6.3	72.0	44.3
Marseille ..	246	16.20	43.04	11.11	70.4	45.5	95.0	— 41.4	66.1	11.9
Moscow ..	226	18.04	29.07	12.07	63.4	14.7	94.1	23.0	54.4	46.5
Naples ..	489	31.00	50.88	21.75	73.0	48.0	102.0	— 13.0	73.5	30.2
New York ..	314	44.63	58.68	33.17	71.4	31.8	98.0	— 33.0	69.1	11.8
Ottawa ..	236	33.51	51.25	25.63	66.6	14.0	101.1	— 19.5	64.8	36.7
Paris (Pare-St. Maur) ..	164	22.68	29.80	10.94	63.5	37.9	100.2	2.7	79.3	23.7
Pekin ..	123	22.66	36.00	18.00	77.9	26.8	97.0	— 34.0	65.6	9.8
Quebec ..	206	41.25	53.79	32.12	63.4	12.6	103.0	21.4	76.1	44.6
Rome ..	166	32.57	57.80	12.72	74.3	46.0	101.0	29.0	59.3	49.5
San Francisco ..	155	23.27	38.82	9.00	58.8	50.5	102.9	10.2	80.4	37.8
Shanghai ..	21	45.00	62.52	27.92	78.0	41.1	94.2	63.4	81.5	78.3
Singapore ..	8	91.99	158.68	32.71	81.2	78.6	91.8	— 22.0	59.7	27.3
Stockholm ..	146	21.60	28.47	11.77	62.2	26.4	91.0	29.7	77.7	37.5
Tokio ..	65	61.45	86.37	45.72	74.8	39.2	99.5	14.0	76.3	39.9
Trieste ..	85	42.94	63.14	26.57	73.9	41.3	97.2	— 14.4	66.7	29.5
Vienna ..	664	25.51	35.55	16.54	65.3	31.3	92.3	— 22.2	69.4	3.6
Vladivostok (Mt.)	420	20.23	38.48	21.17	65.5	9.7	100.0	— 15.0	70.8	32.0
Washington ..	112	43.50	61.33	30.85	74.7	34.5	88.0	28.6	62.6	48.0
Wellington ..	10	39.86	67.68	27.83	61.9	48.7	94.1	— 0.8	65.1	29.5
Zürich ..	1,542	45.15	78.27	29.02	63.3	31.3				

FEDERAL CAPITAL.

					(a)	(b)					
Canberra	..	1,920	23.32	35.89	16.31	67.9	43.8	104.2	14.0	68.8	42.7

STATE CAPITALS.

				(a)		(b)					
Perth ..	197	34.81	49.22	20.21	73.2	56.1	112.2	34.8	74.2	55.3	
Adelaide ..	140	21.15	30.87	11.39	72.9	53.2	116.3	32.0	74.0	51.9	
Brisbane ..	137	18.11	28.20	16.17	76.7	50.8	108.0	30.1	77.2	58.6	
Sydney ..	138	47.10	82.70	23.01	71.0	54.3	108.5	35.7	71.6	53.0	
Melbourne ..	115	25.70	38.04	15.61	66.6	50.1	111.2	27.0	67.6	48.8	
Hobart ..	177	24.01	43.39	13.43	61.4	46.9	105.2	27.0	62.2	45.8	

(a) Mean of the three hottest months.

(b) Mean of the three coldest months.

17. Climatological Tables.—The means, averages, extremes, totals, etc., for a number of climatological elements have been determined from long series of observations at the Australian capitals up to and including the year 1936. These are given in the following tables:—

CLIMATOLOGICAL DATA—CANBERRA, FEDERAL CAPITAL TERRITORY.

LAT. 35° 20' S. LONG. 149° 15' E. HEIGHT ABOVE M.S.L. 1,920 Ft.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M.S. Level and Stan- dard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Prevailing Direction.		Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.								
					9 a.m.	3 p.m.						
No. of yrs. over which observation extends.	19	8	8	8	20	20	15	9	18	11		
January ..	29.833	358 23/33	0.11	4,426	S E & E	W	7.44	4	4.2	9		
February ..	29.903	366 24/33	0.08	3,420	E	W	5.73	5	4.5	8		
March ..	30.000	351 22/31	0.06	3,297	E	W	4.46	5	4.3	8		
April ..	30.061	326 29/29	0.06	3,223	S E & E	N W	2.65	2	4.2	7		
May ..	30.110	302 3/30	0.04	2,603	F	N	1.73	1	4.5	9		
June ..	30.116	386 2/30	0.05	3,058	N	N & W	1.02	1	4.8	6		
July ..	30.102	562 7/31	0.06	3,202	S	W	1.16	1	4.7	7		
August ..	30.071	325 12/21	0.07	3,705	N	N & W	1.09	2	4.6	7		
September ..	30.034	418 28/34	0.09	4,038	E	N	2.79	2	4.0	10		
October ..	29.945	253 30/30	0.08	3,804	E	W	4.11	2	4.4	7		
November ..	29.899	402 14/30	0.09	3,877	E	W	5.60	4	4.5	8		
December ..	29.845	380 6/29	0.10	4,205	E	W	6.65	7	4.5	6		
Year { Totals ..	—	—	—	—	—	—	—	—	—	—		
Year { Averages ..	29.996	—	0.07	3,586	E	W	4.03	36	—	92		
Year { Extremes ..	—	562 7/7/31	—	—	—	—	—	—	4.4	—		

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	20	20	20	20	20	20	(a)	18	13
January ..	82.3	55.1	68.7	104.2 28/32	38.8 25/28	65.4	—	33.2 17/33	236.4
February ..	81.0	55.0	68.5	102.6 16/10	33.0 21/33	69.6	—	26.8 21/33	196.4
March ..	76.0	51.0	63.5	97.0 18/27	31.0 24/35	66.0	—	25.5 24/17	215.9
April ..	66.8	43.8	55.3	83.0 14/25	26.5 29/17	56.5	—	17.5 29/17	190.7
May ..	59.4	37.2	48.3	74.7 9/19	19.0 30/24	55.7	—	12.0 28/20	157.7
June ..	53.2	34.3	43.7	66.2 5/17	17.8 20/35	48.4	—	9.9 20/35	126.4
July ..	52.1	33.7	42.9	65.0 8/19	14.0 19/24	51.0	—	10.0 (d)	144.0
August ..	55.4	34.8	45.1	73.0 (b)	18.0 5/19	55.0	—	11.8 5/19	174.4
September ..	61.2	38.1	49.7	83.2 27/19	24.7 26/36	58.5	—	17.0 26/36	203.5
October ..	68.0	42.9	55.4	93.8 31/19	27.0 2/18	66.8	—	20.0 (e)	232.5
November ..	74.6	48.1	61.4	107.7 29/15	28.1 24/15	69.6	—	31.1 11/16	224.6
December ..	79.2	53.1	66.1	108.0 (c)	32.0 1/21	66.0	—	31.0 (f)	230.1
Year { Averages ..	67.5	43.9	55.7	—	—	—	—	—	—
Year { Extremes ..	—	—	—	104.2 28/1/32	14.0 19/7/21	90.2	—	9.9 20/6/35	(g) 2,332.6

(a) Not available.

(b) 28/1923 and 25/1924.

(c) 12/1914 and 31/1931.

(d) 19/1924 and 24/1935.

(e) 1 and 3/1923.

(f) 1/1923, 3/1924 and 15 and 16/1931.

(g) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).				Rainfall (inches).					Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Highest.	Lowest.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest In One Day.		
No. of yrs. over which observation extends.	18	18	18	18	22	22	22	22	22	4	
January	0.375	56	69	39	1.84	6	5.18 1936	0.07 { 1919 1932	2.92 6/27	6	
February	0.401	62	75	47	1.74	6	4.07 1936	0.09 1933	2.75 23/16	8	
March	0.378	69	79	56	2.19	7	5.81 1914	0.21 1924	1.86 7/20	12	
April	0.308	75	86	63	1.61	7	3.63 1935	0.20 1925	1.04 8/31	10	
May	0.242	81	92	67	1.96	7	13.37 1925	0.06 1934	6.84 27/15	11	
June	0.215	85	93	73	2.14	8	5.86 1931	0.14 1935	3.95 22/25	9	
July	0.208	84	92	74	1.92	10	4.15 1933	0.25 1913	2.49 13/33	7	
August	0.217	80	87	67	2.04	10	3.78 1934	0.01 1914	1.90 18/25	6	
September	0.251	72	81	55	1.65	9	5.26 1915	0.36 1928	2.18 20/15	8	
October	0.282	63	73	48	2.14	9	7.50 1934	0.62 1936	2.74 25/14	11	
November	0.324	58	78	37	1.97	8	6.95 1924	0.09 1918	2.38 5/23	8	
December	0.371	58	70	45	2.12	8	4.49 1910	0.11 1925	2.10 28/29	6	
Year { Totals	—	—	—	—	23.32	95	—	—	—	102	
Year { Averages	0.298	70	—	—	—	—	—	—	—	—	
Year { Extremes	—	—	93	37	—	—	13.37 5/10/25/00	2/1933	6.84 27/5/25	—	

CLIMATOLOGICAL DATA—PERTH, WESTERN AUSTRALIA.

LAT. 31° 57' S., LONG. 115° 50' E. HEIGHT ABOVE M.S.L. 197 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M. Sea Level and Stan- dard Gravity from 9 a.m. and 3 p.m. readings.	Wind.						Mean Amount of Evaporation (Inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pres- sure. (lb.)	Total Miles.	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of yrs. over which observation extends.	52	39	39	39	39	38	38	39	29	36	
January ..	29.906	797 27/98	0.64	10,955	ESE	SSW	10.42	1.9	2.9	14.2	
February ..	29.924	650 6/08	0.59	9,510	ESE	SSW	8.66	1.5	3.1	12.0	
March ..	29.984	651 6/13	0.51	9,755	E	SSW	7.62	1.5	3.5	12.2	
April ..	30.073	955 25/00	0.37	8,079	E NE	SSW	4.73	1.4	4.3	8.4	
May ..	30.070	825 29/32	0.34	7,982	NE	SW	2.75	2.2	5.5	5.6	
June ..	30.062	914 17/27	0.36	7,914	NE	WNW	1.77	2.2	5.9	3.8	
July ..	30.088	1,015 20/26	0.39	8,579	NE	W	1.74	2.1	5.7	5.0	
August ..	30.086	966 15/03	0.41	8,781	NE	SSW	2.35	1.5	5.5	5.5	
September ..	30.062	864 11/05	0.44	8,800	NE	SSW	3.40	1.2	5.0	6.2	
October ..	30.030	809 6/16	0.50	9,649	SE	SW	5.33	1.0	4.8	6.6	
November ..	29.993	777 18/97	0.57	9,925	SE	SW	7.69	1.3	3.9	8.5	
December ..	29.926	770 6/22	0.62	10,725	SE	SSW	9.82	1.9	3.2	12.6	
Year { Totals ..	—	—	—	—	—	—	66.28	19.7	—	100.6	
Year { Averages ..	30.017	—	0.48	9,216	E	SW	—	—	4.4	—	
Year { Extremes ..	—	1,015 20/7/26	—	—	—	—	—	—	—	—	

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	40	40	40	40	40	40	38	38	39
January ..	84.7	63.4	74.0	110.2 12/34	48.6 20/25	61.6	177.3 22/14	40.4 1/21	322.6
February ..	84.0	63.4	71.2	112.2 8/33	47.7 1/02	64.5	173.7 4/34	39.8 1/13	272.5
March ..	81.5	61.5	71.5	106.4 14/22	45.8 8/03	60.6	167.0 19/18	36.7 8/03	268.6
April ..	76.2	57.3	66.8	99.7 9/10	39.3 20/14	60.4	157.0 8/16	31.0 20/14	218.7
May ..	68.0	52.7	60.8	90.4 2/07	34.3 11/14	56.1	146.0 4/25	25.3 11/14	175.1
June ..	64.1	40.6	56.8	81.7 2/14	35.0 30/20	46.7	135.5 9/14	20.5 30/20	144.0
July ..	62.7	47.8	55.3	76.4 21/21	34.2 7/16	42.2	132.9 25/13	25.1 30/20	165.2
August ..	63.8	48.4	56.1	81.0 12/14	35.4 31/08	45.6	145.1 29/21	26.7 24/35	186.1
September ..	66.1	50.1	58.1	90.1 10/15	38.8 18/09	51.3	153.0 22/24	28.1 1/20	208.2
October ..	69.1	52.5	60.8	95.3 30/22	40.0 16/31	55.3	157.5 31/36	29.8 16/31	243.2
November ..	75.7	56.9	66.3	104.6 24/13	42.0 1/04	62.6	167.0 30/15	35.4 6/10	289.0
December ..	81.2	60.9	71.0	107.9 20/04	48.0 2/10	59.9	168.8 11/27	39.0 (a)	324.7
Year { Averages ..	73.3	55.4	64.3	—	—	—	—	—	287.7 (b)
Year { Extremes ..	—	—	—	112.2 8/2/33	31.2 7/7/16	78.0	177.3 22/1/14	25.1 30/7/20	—

(a) 2/1910 and 12/1920.

(b) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (Inches).	Rel. Hum. (%).				Rainfall (Inches).					Dew Mean No. of Days Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest In One Day.		
No. of yrs. over which observation extends.	40	40	40	40	61	61	61	61	61	39	
January ..	0.435	52	61	41	0.34	3	2.17 1870	0.00 (a)	1.74 27/79	2.8	
February ..	0.443	53	65	46	0.40	3	2.98 1915	0.00 (a)	1.63 26/15	3.9	
March ..	0.426	57	66	46	0.83	4	5.71 1934	0.00 (a)	3.03 9/34	6.6	
April ..	0.398	62	73	51	1.67	7	5.85 1926	0.00 1920	2.62 30/04	10.5	
May ..	0.366	73	81	61	5.11	14	12.13 1879	0.98 1903	2.80 20/79	12.9	
June ..	0.337	76	83	68	7.04	17	12.80 1923	2.16 1877	3.90 6/20	13.0	
July ..	0.320	79	84	69	6.76	18	12.28 1926	2.42 1876	3.00 4/91	13.3	
August ..	0.321	73	70	62	5.73	18	12.21 1928	0.46 1900	2.70 1/03	12.0	
September ..	0.340	68	75	58	3.41	15	7.84 1923	0.34 1916	1.82 4/31	10.6	
October ..	0.347	61	75	54	2.20	12	7.87 1890	0.49 1892	1.73 3/33	6.4	
November ..	0.376	54	63	46	0.75	6	2.78 1916	0.00 1891	1.11 30/03	3.8	
December ..	0.409	51	63	44	0.57	4	3.05 1888	0.00 { 1886 1924	1.72 1/88	2.9	
Year { Totals ..	—	—	—	—	34.81	121	—	—	—	98.7	
Year { Averages ..	0.372	63	—	—	—	—	—	—	—	—	
Year { Extremes ..	—	—	84	41	—	—	12.80 6/1923	Nil (b)	3.90 6/6/20	—	

(a) Various years.

(b) Jan., Feb., March, various years.

CLIMATOLOGICAL DATA—ADELAIDE, SOUTH AUSTRALIA.

LAT. 34° 56' S., LONG. 138° 35' E. HEIGHT ABOVE M.S.L. 140 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.				
					9 a.m.	3 p.m.			
No. of yrs. over which observation extends.	80	59	59	59	59	59	67	65	55
January ..	29.916	758 19/90	0.33	7,829	S W	S W	9.06	2.3	3.5
February ..	29.953	691 22/96	0.28	6,594	N E	S W	7.40	2.0	3.5
March ..	30.038	628 9/12	0.23	6,570	S	S W	5.95	2.1	4.0
April ..	30.119	773 10/96	0.21	6,079	N E	S W	3.51	1.6	5.0
May ..	30.125	760 9/80	0.20	6,212	N E	N W	1.07	1.7	5.8
June ..	30.103	750 12/78	0.24	6,447	N E	N	1.26	1.0	6.2
July ..	30.122	674 25/82	0.24	6,665	N E	N W	1.30	1.0	5.9
August ..	30.095	773 31/97	0.27	7,129	N E	S W	1.89	3.2	5.6
September ..	30.041	720 2/87	0.29	7,102	N N E	S W	2.88	3.2	5.2
October ..	29.996	768 28/98	0.32	7,783	N N E	S W	4.78	3.3	5.1
November ..	29.979	677 2/04	0.33	7,465	S W	S W	6.63	3.2	4.6
December ..	29.920	675 12/91	0.33	7,828	S W	S W	8.50	2.6	3.9
Year { Totals ..	—	—	—	—	—	—	—	—	—
Averages ..	30.034	—	0.27	6,983	N E	S W	55.23	26.8	—
Extremes ..	—	773	(a)	—	—	—	—	4.9	56.6

(a) 10/4/96 and 31/8/97.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	80	80	80	80	80	80	56	76	55
January ..	86.0	61.5	73.7	116.3 26/58	45.1 21/84	71.2	180.0 18/82	36.5 14/79	308.6
February ..	86.0	61.9	74.0	113.6 12/99	45.5 23/18	68.1	170.5 10/00	35.8 23/26	263.7
March ..	80.9	58.0	69.9	108.5 9/34	43.9 21/33	66.6	174.0 17/83	32.1 21/33	239.5
April ..	73.2	54.5	63.9	90.0 10/66	39.6 15/59	58.4	155.0 1/83	30.2 16/17	181.0
May ..	65.8	50.3	58.0	89.5 4/21	36.9 (a)	52.6	148.2 12/79	25.6 10/28	150.2
June ..	60.4	46.7	53.6	76.0 23/65	32.5 27/76	43.5	138.8 18/79	22.9 12/13	123.1
July ..	59.0	44.7	51.9	74.0 11/06	32.0 24/08	42.0	134.5 26/90	22.1 30/20	136.6
August ..	62.0	45.9	54.0	85.0 31/11	32.3 17/59	52.7	140.0 31/92	22.8 11/29	163.8
September ..	66.4	48.0	57.2	90.7 23/82	32.7 4/58	58.0	160.5 23/82	25.0 25/27	185.5
October ..	72.4	51.4	61.9	102.9 21/22	36.0 -/57	66.9	162.0 30/21	27.8 (c)	225.9
November ..	78.6	55.4	67.0	113.5 21/65	40.8 2/00	72.7	166.9 20/78	31.5 2/09	263.2
December ..	83.2	58.9	71.1	114.6 29/31	43.0 (b)	71.6	175.7 7/97	32.5 4/84	300.2
Year { Averages ..	72.8	53.2	63.0	—	—	—	—	—	—
Extremes ..	—	—	—	116.3 26/1/58	32.0 24/7/08	84.3	180.0 18/1/82	22.1 30/7/29	2541.3 (d)

(a) 26/1895 and 24/1904.

(b) 16/1861 and 4/1906.

(c) 2/1918 and 4/1931.

(d) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).				Rainfall (inches).				Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of yrs. over which observation extends.	69	69	69	69	98	98	98	98	98	65
January ..	0.339	38	59	29	0.72	4	4.00 1850	Nil (a)	2.30 2/80	3.6
February ..	0.355	41	56	30	0.72	4	6.09 1925	Nil (a)	5.57 7/25	5.5
March ..	0.343	46	58	36	1.02	6	4.60 1878	Nil (a)	3.50 5/78	10.4
April ..	0.335	56	72	37	1.72	9	6.78 1853	0.03 1923	3.15 5/60	13.9
May ..	0.315	67	76	49	2.72	14	7.75 1875	0.10 1934	2.75 1/20	16.0
June ..	0.297	76	84	67	3.08	15	8.58 1976	0.42 1886	2.11 1/20	16.1
July ..	0.277	76	87	66	2.64	17	5.38 1805	0.37 1899	1.75 10/65	17.4
August ..	0.283	69	77	54	2.54	16	6.24 1852	0.35 1914	2.23 19/51	16.7
September ..	0.266	60	72	44	2.08	14	5.83 1923	0.45 1896	1.59 20/23	15.7
October ..	0.298	51	67	29	1.74	11	3.83 1870	0.17 1914	2.24 16/08	12.8
November ..	0.307	42	57	31	1.14	8	4.10 1934	0.04 1885	2.08 7/34	6.7
December ..	0.321	39	50	31	1.03	6	3.98 1861	Nil 1904	2.12 23/13	4.4
Year { Totals ..	—	—	—	—	21.15	124	—	—	—	139.2
Averages ..	0.309	53	—	—	—	—	8.58 6/16	Nil (b)	5.57 7/2/25	—
Extremes ..	—	—	87	20	—	—	—	—	—	—

(a) Various years.

(b) January, February, March, December, various years.

CLIMATOLOGICAL DATA—BRISBANE, QUEENSLAND.

LAT. 27° 28' S., LONG. 153° 2' E. HEIGHT ABOVE M.S.L. 137 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.											
Month.	Bar. corrected to 32° F. M. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Prevailing Direction.		Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.							
					9 a.m.	3 p.m.					
No. of yrs. over which observation extends.	50	26	26	26	50	50	28	50	45	28	
January ..	29.868	361 1/22	0.72	4,791	S E	E & N E	6.632	7.5	5.7	3.4	
February ..	29.904	503 5/31	0.12	4,420	S & S E	N E & E	5.478	5.8	5.7	2.4	
March ..	29.965	488 1/29	0.10	4,411	S	S E & E	5.054	4.6	5.3	5.0	
April ..	30.012	400 3/25	0.00	3,680	S	S E & E	3.920	4.0	4.5	7.0	
May ..	30.077	393 7/16	0.07	3,879	S	S E	3.000	3.2	1.5	8.8	
June ..	30.073	455 14/28	0.08	3,880	W & S W	S & W	2.762	2.4	1.1	9.1	
July ..	30.073	350 2/23	0.07	3,824	W & S W	S W	2.880	2.7	3.1	12.6	
August ..	30.098	331 6/23	0.08	3,910	W & S W	N W & N E	3.487	2.8	1.4	12.0	
September ..	30.041	320 4/31	0.08	3,876	W & S W	N E & E	4.817	5.0	3.5	12.4	
October ..	30.004	355 14/36	0.10	4,385	S & S W	N E	5.730	6.0	1.1	8.8	
November ..	29.961	371 10/28	0.11	4,500	S E & N E	N E	5.317	5.7	1.3	9.1	
December ..	29.888	467 15/26	0.12	4,821	S E	N E	7.045	6.8	5.3	3.7	
Year { Totals ..	—	—	—	—	—	—	56.157	65.6	—	4.1	
Year { Averages ..	30.000	—	—	4,232	S	N E	—	—	4.5	—	
Year { Extremes ..	—	503 5/2/31	0.10	—	—	—	—	—	—	—	

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	50	50	50	50	50	50	42	50	25
January ..	85.4	68.9	77.2	108.9 14/02	58.8 4/93	50.1	166.4 10/17	49.9 4/92	232.8
February ..	81.5	68.0	70.6	105.7 21/28	58.5 23/31	47.2	168.2 0/10	47.1 20/31	211.0
March ..	82.3	66.3	74.3	99.4 5/19	52.4 29/13	47.0	161.7 4/25	45.4 29/13	211.1
April ..	79.0	61.5	70.2	95.2 1/24	44.4 25/25	50.8	153.8 11/16	36.7 24/25	211.2
May ..	73.5	55.1	64.5	80.3 21/23	41.3 20/03	39.0	147.0 1/10	29.2 2/17	200.5
June ..	69.3	51.0	60.2	88.0 10/12	39.3 20/08	52.0	136.0 3/18	25.0 23/08	182.0
July ..	68.5	48.7	58.6	84.1 28/08	30.1 3/04	47.8	140.1 20/15	22.0 11/03	240.5
August ..	71.2	49.0	60.6	88.5 28/28	37.4 6/87	51.1	141.9 20/17	27.1 9/04	285.7
September ..	75.9	54.8	65.2	95.2 10/12	40.7 1/00	54.5	155.5 20/03	30.0 1/24	240.0
October ..	76.6	60.0	69.4	101.4 18/03	43.3 3/00	58.1	157.4 21/18	34.0 2/06	255.5
November ..	82.5	64.2	73.4	100.1 18/13	48.5 2/05	57.9	162.3 8/08	38.8 1/08	245.8
December ..	84.0	67.4	76.2	105.9 26/93	56.4 13/12	49.5	161.7 27/26	49.1 3/94	249.4
Year { Averages ..	78.0	59.7	68.9	—	—	—	—	—	260.4
Year { Extremes ..	—	—	—	108.9 14/1/02	36.1 (c)	72.8	166.4 10/1/17	23.9 11/7/90	(d)

(a) 9/96 and 5/03.

(b) 12/94 and 2/96.

(c) 12/7/94 and 2/7/96.

(d) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pres- sure (inches).	Rel. Hum. (%).					Rainfall (inches).				Dew.	
		Mean 9 a.m.	Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest In One Day.		Mean No. of Days Dew.
No. of yrs. over which observation extends.	50	50	50	50	85	77	85	85	85	67	50	
January ..	0.630	66	79	53	6.44	13	27.72 1805	0.32 1019	18.31 21/87	9.2		
February ..	0.646	69	82	55	6.34	14	40.30 1804	0.58 1810	10.61 6/31	9.3		
March ..	0.613	72	85	50	5.00	15	34.04 1879	Nil 1849	11.18 11/08	12.4		
April ..	0.520	71	80	60	3.81	12	15.28 1807	0.05 1807	5.46 5/33	14.0		
May ..	0.421	73	84	61	2.71	10	11.88 1876	Nil 1846	5.62 9/79	16.1		
June ..	0.358	71	84	63	2.71	8	11.03 1873	Nil 1817	6.01 9/33	14.3		
July ..	0.328	72	81	61	2.23	8	8.46 1889	Nil 1841	3.54 (e)	15.5		
August ..	0.348	69	80	56	1.96	7	14.67 1879	Nil (f)	4.80 12/87	14.7		
September ..	0.400	64	76	47	2.02	8	5.13 1886	0.10 1007	2.16 2/04	13.0		
October ..	0.472	60	72	45	2.51	9	9.90 1852	0.11 1000	3.75 3/27	12.6		
November ..	0.533	60	72	45	3.75	10	12.41 1917	Nil 1842	4.46 10/80	8.8		
December ..	0.504	61	69	51	4.90	12	13.90 1010	0.35 1865	6.60 28/71	8.4		
Year { Totals ..	—	—	—	—	45.04	126	—	—	—	—	149.8	
Year { Averages ..	0.490	68	—	—	—	—	—	—	—	—	—	
Year { Extremes ..	—	—	85	15	—	—	40.30 2/03	Nil (b)	18.31 21/1/87	—		

(a) 1362, 1869, 1880, and 16/99.

(b) March, May, June, July, August and November, various years.

(c) 15/76

CLIMATOLOGICAL DATA—SYDNEY, NEW SOUTH WALES.

LAT. 33° 52' S., LONG. 151° 12' E. HEIGHT ABOVE M.S.L. 138 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. Mm. Sea Level and Stan- dard Gravity from buoy readings.	Wind.*					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pres- sure. (lb.)	Total Miles.	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of yrs. over which observation extends.	78	70	70	70	70	70	57	77	75	26
January ..	29.891	627 3/93	0.27	6,982	N E	E N E	5.383	5.0	5.8	4.8
February ..	29.942	697 12/69	0.24	6,010	N E	E N E	4.243	4.4	6.0	5.3
March ..	30.013	754 20/70	0.18	5,319	W	E N E	3.657	4.2	5.5	5.8
April ..	30.068	642 6/82	0.16	5,330	W	E N E	2.637	3.7	5.0	7.5
May ..	30.085	682 6/98	0.17	5,443	W	N E	1.837	3.0	4.9	7.7
June ..	30.064	642 13/08	0.21	5,861	W	W	1.449	2.1	4.8	8.3
July ..	30.069	744 17/79	0.20	6,038	W	W	1.535	2.3	4.4	10.2
August ..	30.068	649 22/72	0.19	5,889	W	N E	1.966	3.2	4.0	11.1
September ..	30.010	771 6/74	0.22	6,128	W	N E	2.728	4.0	4.3	9.8
October ..	29.967	741 4/72	0.25	6,651	W	E N E	3.979	5.0	4.9	7.6
November ..	29.910	583 12/87	0.25	6,574	E N E	E N E	4.650	5.4	5.6	5.7
December ..	29.882	750 3/84	0.26	6,947	E N E	E N E	5.387	5.9	5.7	4.8
Year { Totals ..	—	—	—	—	—	—	39.391	48.2	—	83.6
Year { Averages ..	30.000	—	0.22	6,140	W	E N E	—	—	5.0	—
Year { Extremes ..	—	771 6/94	—	—	—	—	—	—	—	—

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	78	78	78	78	78	78	74	78	16†
January ..	78.4	64.9	71.6	108.5 13/96	51.2 14/65	57.3	164.3 26/15	43.7 6/25	226.3
February ..	77.7	65.0	71.3	107.8 8/26	49.3 27/63	58.5	161.2 8/26	42.8 22/33	202.6
March ..	75.7	62.0	69.3	102.6 3/69	48.8 14/86	53.8	158.3 10/26	39.9 17/13	201.8
April ..	71.4	58.0	61.7	91.4 1/36	44.6 27/64	46.8	144.1 10/77	33.3 24/09	187.0
May ..	65.6	52.1	58.8	86.0 1/19	40.2 22/59	45.8	129.7 1/96	29.3 25/17	176.0
June ..	61.2	48.2	54.7	80.4 11/31	35.7 22/32	44.7	125.5 2/23	28.0 22/32	180.9
July ..	59.0	46.0	53.0	78.3 22/26	35.9 12/90	42.4	124.7 19/77	24.0 4/93	186.6
August ..	62.9	47.5	55.2	82.0 31/84	36.8 3/72	45.2	149.0 30/78	26.1 4/09	221.1
September ..	67.0	51.3	59.2	92.3 27/19	40.8 18/64	51.5	142.2 12/78	30.1 17/05	222.1
October ..	71.3	55.8	63.6	98.9 19/98	42.2 6/37	56.7	152.2 20/38	32.7 6/05	241.2
November ..	71.3	59.6	67.0	102.7 21/78	45.8 1/05	56.9	158.5 28/90	30.0 6/06	232.0
December ..	77.0	62.9	70.0	107.5 31/04	48.4 3/24	59.1	164.5 27/89	41.4 3/24	225.3
Year { Averages ..	70.2	56.2	63.2	—	—	—	—	—	2,481.8
Year { Extremes ..	—	—	—	108.5 13/1/96	35.7 22/6/32	72.8	164.5 27/12/80	24.0 4/7/93	(a)

(a) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pres- sure (Inches).	Rel. Hum. (%).			Rainfall (Inches).					Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest In One Day.	
No. of yrs. over which observation extends.	78	78	78	78	78	78	78	78	78	77
January ..	0.546	67	78	58	3.54	14	15.26 10/11	0.25 19/32	7.08 13/11	1.5
February ..	0.561	70	81	59	4.27	13	18.56 18/73	0.23 19/33	8.00 25/73	2.6
March ..	0.529	73	85	62	4.85	15	18.70 18/70	0.42 18/76	6.52 9/13	4.7
April ..	0.444	76	87	63	5.45	14	24.49 18/61	0.06 18/68	7.52 29/60	6.9
May ..	0.359	78	90	63	5.08	14	23.03 10/10	0.18 18/60	8.36 28/89	7.0
June ..	0.302	78	89	68	4.69	13	16.30 18/85	0.19 10/4	5.17 16/84	6.8
July ..	0.278	76	88	63	4.80	12	13.21 10/90	0.12 18/62	7.80 7/31	7.4
August ..	0.292	71	84	56	2.88	11	14.80 18/90	0.04 18/85	5.33 2/60	6.8
September ..	0.332	66	79	49	2.89	12	14.05 18/76	0.08 18/82	5.69 10/70	4.8
October ..	0.384	62	77	46	2.84	12	11.14 10/16	0.21 18/67	6.37 13/02	3.4
November ..	0.444	63	79	42	2.80	12	9.88 18/65	0.07 19/15	4.23 19/00	2.3
December ..	0.505	65	77	52	2.97	13	15.82 19/20	0.23 19/13	4.75 13/10	1.7
Year { Totals ..	—	—	—	—	47.10	155	—	—	—	56.8
Year { Averages ..	0.403	70	—	—	—	—	24.49 4/18/61	0.04 8/18/85	8.00 25/73	—
Year { Extremes ..	—	—	90	42	—	—	—	—	—	—

* Early records revised during 1929. Values for period 1867—September 1885, reduced 20 per cent.; for period September 1885 to March 1913, reduced 10 per cent.
 † From 1921 only; previous records discarded owing to faulty exposure of instruments.

CLIMATOLOGICAL DATA—MELBOURNE, VICTORIA.

LAT. 37° 49' S., LONG. 144° 58' E. HEIGHT ABOVE M.S.L., 115 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

BAROMETER, WIND, EVAPORATION, &c., &c., &c.											
Month.	Bar. corrected to 32° F. M. Sea Level and Standard Gravity from hourly readings.	Wind.						Mean Amount of Evaporation (Inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.						
					9 a.m.	3 p.m.					
No. of yrs. over which observation extends.	79	63	63	63	63	63	64	29	79	29	
January	29.900	583 10/97	0.26	6,900	S W	S E	6.427	1.9	5.1	7.1	
February	29.959	566 8/68	0.23	5,963	S W	S E	5.037	2.3	4.0	6.8	
March	30.033	677 9/81	0.19	5,959	S W	S E	4.015	1.8	5.5	5.4	
April	30.100	597 7/68	0.17	5,394	S W	N W	2.408	1.2	5.9	4.5	
May	30.108	603 12/65	0.16	5,492	N W	N E	1.490	0.6	6.4	3.3	
June	30.082	761 13/76	0.20	5,871	N W	N E	1.131	0.4	6.6	2.4	
July	30.087	755 8/74	0.19	5,956	N W	N E	1.003	0.4	6.3	2.9	
August	30.062	637 14/75	0.22	6,415	N W	N E	1.198	1.0	7.3	2.7	
September	30.099	617 11/72	0.24	6,420	N W	N E	1.198	1.1	7.3	2.7	
October	29.965	899 5/66	0.25	6,844	S W	N W	3.357	1.9	6.0	3.6	
November	29.952	734 13/66	0.25	6,602	S W	S E	4.536	2.4	5.9	3.8	
December	29.899	655 1/75	0.27	7,024	S W	S E	5.736	2.0	5.5	4.5	
Year { Totals	—	—	—	—	—	—	39.049	17.1	—	50.6	
Averages	30.013	—	0.22	6,246	S W	N W	—	—	5.9	—	
Extremes	—	899 5/10/66	—	—	—	—	—	—	—	—	

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	81	81	81	81	81	81	76	77	55
January ..	78.0	56.7	67.4	111.2 14/62	42.0 28/85	69.2	178.5 14/62	30.2 28/85	258.1
February ..	78.0	57.2	67.6	100.5 7/01	42.2 23/74	60.3	167.5 15/60	30.2 6/01	238.8
March ..	71.5	51.7	61.6	103.5 5/33	37.1 17/34	66.4	101.5 1/05	23.9 1/05	268.0
April ..	68.1	50.7	59.4	94.0 (a)	34.8 24/88	59.2	152.0 8/61	25.0 23/07	159.0
May ..	61.6	46.7	54.1	83.7 7/05	29.4 29/80	54.3	142.5 2/39	21.1 20/10	138.1
June ..	56.8	43.9	50.4	72.2 1/07	28.0 11/66	44.2	129.0 11/61	19.0 30/29	110.0
July ..	55.7	41.9	48.8	69.3 22/26	27.0 21/60	42.3	125.8 27/80	20.5 12/03	130.2
August ..	58.7	43.4	51.0	77.0 20/85	28.3 11/63	48.7	137.4 29/69	21.3 14/02	152.3
September ..	62.7	45.6	54.1	88.6 28/38	31.1 16/08	57.5	142.1 20/67	22.8 8/18	171.5
October ..	67.1	48.3	57.7	98.4 24/14	32.1 3/71	66.3	154.3 28/68	24.8 22/18	100.4
November ..	71.4	51.3	61.3	105.7 27/94	30.5 2/90	75.2	159.0 29/05	24.0 2/96	230.8
December ..	75.3	54.4	64.0	110.7 15/76	40.0 4/70	70.7	170.3 20/69	33.2 1/04	245.8
Year { Averages ..	67.3	49.6	58.4	—	—	—	—	—	239.5
Extremes ..	—	—	—	111.2 14/1/62	27.0 21/7/69	84.2	178.5 14/1/62	19.9 30/6/29	—

(a) 6/1865 and 17/1922.

(b) 17/1884 and 20/1897.

(c) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (Inches).	Rel. Hum. (%).				Rainfall (Inches).				Dew.
	Mean 9 a.m.	Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.		
No. of yrs. over which observation extends.	29	29	29	29	81	81	81	81	78	29
January ..	0.385	58	65	50	1.90	8	5.68 1904	0.01 1932	2.97 9/97	2.6
February ..	0.417	62	69	48	1.75	7	6.24 1904	0.03 1870	3.37 18/19	4.1
March ..	0.380	64	73	57	2.21	10	7.50 1901	0.14 1934	3.55 5/10	7.6
April ..	0.318	72	82	60	2.31	11	0.71 1901	Nil 1923	2.28 22/01	9.2
May ..	0.310	79	86	71	2.11	13	4.31 1862	0.14 1934	1.85 7/91	10.3
June ..	0.278	82	89	66	2.06	11	4.51 1850	0.73 1877	1.71 21/04	8.0
July ..	0.265	82	86	66	1.80	11	7.02 1801	0.57 1902	2.71 12/01	8.6
August ..	0.211	78	85	60	1.85	15	1.01 1924	0.48 1903	1.94 26/24	7.8
September ..	0.260	69	76	60	2.31	14	7.93 1916	0.52 1907	2.62 12/30	6.8
October ..	0.306	62	73	53	2.66	13	7.61 1860	0.20 1914	3.00 17/06	4.7
November ..	0.33	60	71	52	2.26	11	0.71 1916	0.25 1905	2.57 16/76	2.2
December ..	0.370	59	69	51	2.35	10	7.18 1863	0.11 1904	3.20 1/34	1.8
Year { Totals ..	—	—	—	—	25.70	140	—	—	—	75.3
Averages ..	0.324	69	—	—	—	—	—	—	—	—
Extremes ..	—	—	89	48	—	—	7.93 9/1916	Nil 4/1923	3.55 5/3/10	—

CLIMATOLOGICAL DATA—HOBART, TASMANIA.

LAT. 42° 53' S., LONG. 147° 20' E. HEIGHT ABOVE M.S.L., 177 Ft.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	No. of yrs. over which observation extends.	Bar. corrected to 32° F., Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.	
			Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.					
						9 a.m.					3 p.m.
	52	26	26	26	31	31	26	29	74	30	
January	29.826	500 30/16	0.10	5,962	N W to N	S E	4.815	0.8	6.1	2.3	
February	20.917	605 4/27	0.15	4,761	N & N N W	S E	3.671	1.1	6.0	2.4	
March	29.947	443 19/27	0.13	4,983	N & N N W	S E	3.036	1.3	5.9	2.4	
April	29.969	533 27/26	0.14	4,865	N W to N	N W & S E	1.979	0.7	6.2	1.6	
May	29.997	484 20/36	0.12	4,712	N W to N	N W to N	1.372	0.4	6.1	2.4	
June	29.966	567 27/20	0.12	4,179	N W & N N W	N to N W	0.905	0.5	6.1	2.2	
July	29.932	499 19/35	0.13	4,833	N N W & N W	N W to N	0.928	0.4	5.8	2.2	
August	29.916	612 19/26	0.11	5,110	N to N W	N W to N	1.281	0.4	6.0	2.0	
September	29.852	516 26/15	0.18	5,626	N to N W	N W & S E	1.958	0.7	6.1	1.6	
October	29.825	461 8/12	0.20	5,122	N to N W	S E & N W	3.034	0.6	6.4	1.1	
November	29.813	508 18/15	0.19	5,782	N to N W	S E	3.818	0.7	6.4	1.5	
December	29.818	562 1/31	0.17	5,666	N to N W	S E	1.376	0.8	6.3	1.3	
Year { Totals	26.898	—	—	—	—	—	31.176	8.1	—	23.0	
Year { Averages	—	612	0.16	5,212	N to N W	S E & N W	—	—	6.1	—	
Year { Extremes	—	19/8/26	—	—	—	—	—	—	—	—	

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extremes Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observation extends.	66	66	66	90	90	90	47	69	16*
January	71.0	52.8	61.0	105.0 (a)	40.0 3/72	65.0	160.0 (b)	30.6 19/97	235.0
February	71.2	53.3	62.2	104.4 12/99	39.9 29/87	64.1	158.0 24/98	28.3 8	196.8
March	67.0	50.9	59.1	99.0 -/61	35.1 31/26	63.8	150.0 3/05	27.5 30/02	199.3
April	63.5	47.7	55.1	90.0 1/56	30.0 25/50	60.0	142.0 18/93	25.0 -/86	141.6
May	57.4	43.9	50.6	77.8 5/21	26.2 20/02	48.6	128.0 (c)	20.0 19/02	142.2
June	52.7	41.0	46.8	75.0 7/74	28.0 22/79	47.0	122.0 12/94	21.0 6/87	118.2
July	52.1	39.4	45.8	72.0 22/77	27.0 18/66	45.0	121.0 12/03	18.7 16/86	120.4
August	55.0	41.1	48.0	77.0 3/76	30.0 10/73	47.0	120.0 -/87	20.1 7/00	150.4
September	58.5	43.2	51.0	81.7 23/66	30.0 12/41	51.7	138.0 23/01	18.3 16/20	173.2
October	62.6	45.0	54.1	92.0 24/11	31.0 12/79	60.9	180.0 9/93	22.8 6/1	160.0
November	65.9	48.2	57.0	98.0 23/88	35.2 5/13	62.8	151.0 10/92	26.0 1/08	220.8
December	69.0	51.2	60.1	105.2 30/97	38.0 13/06	67.2	157.0 30/18	27.2 -/86	217.6
Year { Averages	62.2	46.5	54.3	—	—	—	—	—	2125.3
Year { Extremes	—	—	—	105.2 30/12/97	27.0 18/7/66	78.2	165.0 24/2/98	18.3 16/9/26	(r)

(a) 27/49 and 1/00. (b) 5/86 and 13/05. (c) -/89 and -/93. (d) 1/86 and -/99. (e) Total for year.

* Early records discarded owing to faulty instrument.

CLIMATOLOGICAL DATA—HOBART, TASMANIA—*continued.*

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pres- sure (inches).	Rel. Hum. (%).				Rainfall (inches)				Dew.
	Mean 9 a.m.	Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest In One Day.	Mean No. of Days Dew.
No. of yrs. over which observation extends.	50	50	50	50	94	93	94	94	70	27
January ..	0.350	58	72	46	1.82	17	5.61 1853	0.01 1841	2.06 1846	0.5
February ..	0.355	63	77	52	1.50	9	0.15 1854	0.07 1847	4.50 27/5/44	1.3
March ..	0.329	66	77	58	1.73	10	7.60 1854	0.02 1843	3.27 11/32	5.0
April ..	0.290	72	84	58	2.00	12	8.50 1935	0.07 1904	5.02 20/07	9.1
May ..	0.265	78	80	65	1.83	13	6.37 1905	0.10 1843	3.22 14/58	13.3
June ..	0.240	80	91	68	2.21	14	8.15 1890	0.22 1853	4.11 13/56	8.8
July ..	0.230	80	94	72	2.14	15	6.02 1922	0.39 1850	2.51 18/22	8.9
August ..	0.239	75	92	64	1.84	14	10.16 1858	0.23 1851	4.35 12/58	8.4
September ..	0.254	67	85	53	2.07	15	7.14 1844	0.39 1847	2.75 18/44	5.1
October ..	0.270	63	73	51	2.33	15	6.67 1906	0.26 1850	2.58 4/06	2.9
November ..	0.295	60	72	50	2.45	14	8.94 1849	0.16 1854	3.97 7/40	1.3
December ..	0.318	58	67	45	2.09	12	9.00 1875	0.11 1842	2.82 21/29	0.8
Year { Totals ..	—	—	—	—	24.04	153	—	—	—	65.3
Averages ..	0.282	67	—	—	—	—	—	—	—	—
Extremes ..	—	—	94	45	—	—	10.26 8/1858	0.02 3/1843	5.02 20/4/60	—

(a) 4.18 on 28/54 also.

§ 3. Standard Times in Australia.

Prior to 1895 the official time adopted in the several colonies was for most purposes the mean solar time of the capital city of each.

In November, 1892, an intercolonial conference of surveyors was held in Melbourne to consider, among other things, the advantages of introducing the system of standard time. In this system it was proposed to make the initial meridian that of Greenwich, and to change local standard time by whole hours according to the longitude east or west of that of Greenwich. Thus for every difference of 15° in longitude a change of one hour would be required. The minutes and seconds would then be identical everywhere.

To give effect to this proposal it was suggested that Australia should be divided into three zones, the standard times for which should be respectively the mean solar times of the meridians of 120°, 135° and 150° East longitude, thus giving standard times 8, 9 and 10 hours respectively, ahead of Greenwich time. It was proposed that the 120° zone should comprise Western Australia, that the 135° zone should comprise South Australia and the Northern Territory, and that the 150° zone should comprise Queensland, New South Wales, Victoria and Tasmania.

The matter was also considered by several intercolonial postal conferences, and eventually in 1894 and 1895 legislation was enacted by each of the colonies in accord with the recommendations of the surveyors' conference of 1892.

In 1898 the South Australian legislature amended its earlier provision, and adopted the mean solar time of the meridian 142° 30' East longitude as the standard time for that colony, thus reducing the difference between the standard time of Adelaide and that of the capitals of the eastern colonies from an hour to half-an-hour, and forfeiting the great advantage of the system, viz., that the minutes and seconds should be identical throughout the world.

Particulars concerning these enactments are as follows :—

STANDARD TIMES IN AUSTRALIA.

State.		Date when Act came into Operation.		Meridian Selected.	Time Ahead of Greenwich. Hours.
New South Wales	..	1st February, 1895	..	150° E.	10
Victoria	..	1st February, 1895	..	150° E.	10
Queensland	..	1st January, 1895	..	150° E.	10
South Australia	..	1st February, 1895	..	135° E.	9
South Australia	..	1st May, 1899	..	142° 30' E.	9½
Western Australia	..	1st December, 1895	..	120° E.	8
Tasmania	..	1st September, 1895	..	150° E.	10

The standard time in the Federal Capital Territory is the same as in New South Wales.

Consequent upon the opening of the Trans-Australian Railway an arrangement has been made by which the change of time between South Australia and Western Australia (viz., 1½ hours) is divided into two changes of 45 minutes each. Going east from Kalgoorlie the first change is made at Rawlinna, 235.18 miles out, where the time is put forward by 45 minutes. The second change of the same amount is made at Tarcoba, 794.05 miles out. Thenceforward South Australian standard time is kept. The advantage of standard time has thus been still further sacrificed, as there is not now even a whole half hour difference; the essential idea of standard zone time has to this extent, therefore, been abandoned. The State Observatories at Sydney, Melbourne, Adelaide and Perth derive time by astronomical observation. By arrangement with the Australian Broadcasting Commission observatory time-signals are broadcast in the several States at intervals during the day. In addition, the Amalgamated Wireless (Australasia) Ltd. re-broadcast the daily time-signals of certain overseas stations.

CHAPTER III. GENERAL GOVERNMENT.

§ 1. Scheme of Parliamentary Government.

1. **General.**—A brief account of the general legislative powers of the Commonwealth and States is given in preceding issues of the Official Year Book (*see* No. 13, pp. 927 to 951, and No. 22, page 64).

2. **Powers and Functions of the Governor-General and of the State Governors.**—A detailed statement of the powers and functions of the Governor-General and of the State Governors will be found in preceding issues of the Official Year Book (*see* No. 18, pp. 78 to 80).

3. **Governor-General and State Governors.**—The present Governor-General is Brigadier-General the Right Honorable ALEXANDER GORE ARRWRIGHT, BARON GOWRIE, V.C., P.C., G.C.M.G., C.B., D.S.O. He assumed office on the 23rd January, 1936.

The following is a list of the Governors of the various States of the Commonwealth :—

New South Wales ..	The Rt. Hon. LORD WAKEHURST, K.C.M.G.
Victoria	Captain the Rt. Hon. WILLIAM CHARLES ARCEDECKNE, BARON HUNTINGFIELD, K.C.M.G.
Queensland	Colonel the Rt. Hon. SIR LESLIE ORME WILSON, G.C.S.I., G.C.I.E., K.C.M.G., D.S.O.
South Australia ..	Major-General SIR WINSTON JOSEPH DUGAN, K.C.M.G., C.B., D.S.O.
Western Australia ..	Lieut.-Governor—The Hon. SIR JAMES MITCHELL, K.C.M.G.
Tasmania	SIR ERNEST CLARK, K.C.B., C.B.E.

4. **The Cabinet and Executive Government.**—(i) *General.* In both the Commonwealth and the State Legislatures the forms of government have been founded on their prototypes in the Imperial Government, and the relations established between the Ministry and the representatives of the people are in accordance with those prevailing in Great Britain. The executive powers in the Commonwealth are vested in the Governor-General in Council, and in the State Governments in the Governor in Council. The Executive Council in the Commonwealth and in the States is practically co-extensive with a group of departmental chiefs, who are usually spoken of as the Cabinet, and who change with the rise and fall of party majorities. In the Commonwealth Government, however, as well as in the States of Victoria and Tasmania, the Cabinet on leaving office remain members of the Executive Council, though they no longer attend its meetings, and it is in fact an essential feature of the Cabinet system of Government that they should not do so, except to assist the Governor in transacting purely formal business, or to advise on non-political questions.

(ii) *The Executive Council.* This body is composed of the Governor and the Ministers of State holding office for the time being. The latter are sworn both as Executive Councillors and as Ministers controlling the different administrative departments. The meetings are official in character: they are presided over by the Governor-General (or Governor) and are attended by the clerk, who keeps a formal record of the proceedings. At these meetings the decisions of the Cabinet are put into official form and made effective, appointments are confirmed, resignations accepted, proceedings ordered, and notices and regulations published.

(iii) *The Appointment of Ministers and of Executive Councillors.* Although it is technically possible for the Governor to make and unmake cabinets at his pleasure, under all ordinary circumstances his apparent liberty in choosing his Executive Council is virtually restricted by the operation of constitutional machinery. When a Ministry is defeated in Parliament or at the polls, the procedure both in the Commonwealth and the State Parliaments generally, though not invariably, follows that prevailing in the Imperial Parliament. The customary procedure in connexion with the resignation or acceptance of office by a Ministry is described fully in previous issues of the Year Book.

(See No. 6, page 942.) It is necessary to add that subsequent amending legislation has, in most of the States, obviated the necessity of responsible Ministers vacating their seats on appointment to office.

(iv) *Ministers in Upper and Lower Houses.* The subjoined table shows the number of Ministers with seats in the Upper or Lower Houses of each Parliament in August, 1937:—

AUSTRALIAN PARLIAMENTS—MINISTERS IN UPPER OR LOWER HOUSES,
1937.

Ministers with Seats in—	C'wealth.	N.S.W.	Vict.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
The Upper House ..	3	3	4	(a)	2	2	2	16
The Lower House ..	10	12	8	10	4	7	6	57
Total ..	13	15	12	10	6	9	8	73

(a) Abolished in 1922.

(v) *The Cabinet.* (a) *General.* The meetings of this body are private and deliberative. The actual Ministers of the day are alone present, no records of the meetings transpire, and no official notice is taken of the proceedings. The members of the Cabinet, being the leaders of the party in power in Parliament, control the trend of legislation, and must retain the confidence of the people and also of the Governor-General (or Governor), to whom they act as an advising body. They also in effect wield, by virtue of their seats on the Executive Council, the whole executive force of the community. In summoning, proroguing, or dissolving Parliament, the Governor-General (or Governor) is usually guided by the advice tendered him by the Cabinet, though legally in no way bound to accept such advice.

(b) *Commonwealth Ministers of State.* A statement showing the names of Ministers of State who have held office from the inauguration of the Commonwealth Government to 1925 will be found in Official Year Book No. 18, pages 82 and 83.

(c) *State Ministries.* A list of the members of the Ministry in each State in August, 1937, will be found in § 3 of this Chapter.

5. *Number and Salary of Members of the Legislatures.*—The following table shows the number and annual salary of members in each of the legislative chambers in August, 1937:—

MEMBERS OF COMMONWEALTH AND STATE PARLIAMENTS, AND ANNUAL SALARIES, 1937.

Members in—	C'wealth.	N.S.W.	Vict.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
MEMBERS.								
Upper House ..	36	60	34	(a)	20	30	18	198
Lower House ..	75	90	65	62	46	50	30	418
Total ..	111	150	99	62	66	80	48	616
ANNUAL SALARY.								
Upper House ..	£ 950	£ ..	£ 200	(a)	£ 400	£ 600	(b) 370-500	..
Lower House ..	950	670	500	650	400	600	(b) 400-500	..

(a) Abolished in 1922.

(b) According to area of electorate and distance from the Capital.

The use of the expressions "Upper House" and "Lower House" in the above statement, though not justified constitutionally, is convenient, inasmuch as the legislative chambers are known by different names in the Commonwealth and in some of the States.

6. **Enactments of the Parliament.**—In the Commonwealth, all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution Act. In the States, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly or House of Assembly. The Governor-General or the State Governor acts as Viceroy as regards giving the Royal assent to or vetoing Bills passed by the Legislatures, or reserving them for the special consideration of the Sovereign. In the States, the Councils and Assemblies are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States, in all cases whatsoever. Subject to certain limitations, they may alter, repeal, or vary their Constitution. Where a law of a State is inconsistent with a law of the Commonwealth the latter prevails, and the former is, to the extent of the inconsistency, invalid.

§ 2. Parliaments and Elections.

1. **Qualifications for Membership and for Franchise.**—The conspectus in § 4 of "General Government" in Year Book No. 13 contains particulars, as in 1920, relating to the legislative chambers in the Commonwealth and State Parliaments, and shows concisely the qualifications necessary for membership and for the franchise in each House. (These are, in the main, applicable in 1937, but it must be remembered that Queensland abolished the Upper House in 1922.) It has further to be remembered that in 1925 the Commonwealth Parliament passed an Act removing the disqualification on racial grounds from (a) natives of British India and (b) persons who have become naturalized. Disqualification of persons otherwise eligible, either as members or voters, is generally on the usual grounds of being of unsound mind or attainted of treason, being convicted of certain offences, and, as regards membership, on the grounds of holding a place of profit under the Crown, being pecuniarily interested in a Government contract except as a member of an incorporated company of more than twenty-five persons, or being an undischarged bankrupt.

2. **The Federal Government.**—The Senate consists of 30 members, six being returned by each of the original federating States. Members of this Chamber are elected for a term of six years, but by a provision in the Constitution half the members retire at the end of every third year, although they are eligible for re-election. In accordance with the Constitution, the total number of members of the House of Representatives must be as nearly as possible double that of the Senate. In the House of Representatives the States are represented on a population basis, and the numbers in August, 1937, were as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6; Western Australia, 5; Tasmania, 5; Northern Territory, 1—total, 75. The member representing the Northern Territory may join in the debates but is not entitled to vote, except on a motion for the disallowance of any ordinance of the Territory or on any amendment of any such motion. The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. In elections for Senators, the whole State constitutes the electorate. For the purpose of elections for the House of Representatives, the State is divided into single electorates corresponding in number with the number of members to which the State is entitled. Members of both Houses are paid at the rate of £950 per annum. Further information regarding the Senate and the House of Representatives is given in earlier issues.

3. **Federal Elections.**—There have been thirteen complete Parliaments since the inauguration of Federation. The fifth Parliament, which was opened on the 9th July, 1913, was dissolved on the 30th July, 1914, in somewhat unusual circumstances. Under Section 57 of the Constitution, it is provided that, should the Senate fail to pass, or pass with amendments, any proposed law previously passed by the House of Representatives, and should the latter House, after an interval of three months, again pass the proposed

law, with or without the amendments of the Senate, and the Senate for a second time reject it or pass it with amendments to which the lower House will not agree, then the Governor-General may dissolve the two Houses simultaneously. For the first time in the history of the Commonwealth this deadlock between the Senate and the House of Representatives occurred in the second session of the fifth Parliament, and, in accordance with the section of the Constitution referred to above, both Houses were dissolved by the Governor-General. Until 1927 the Parliament met at Melbourne; it now meets at Canberra, the first meeting at Parliament House, Canberra, being opened by H.R.H. the Duke of York, on the 9th May, 1927. The first session of the fourteenth Parliament opened on the 23rd October, 1934. Particulars regarding Commonwealth elections since 1922 will be found in the following table:—

FEDERAL ELECTIONS.

Date.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.
THE SENATE.									
16th December, 1922	1,494,508	1,487,916	2,982,424	966,551	761,695	1,728,246	64.67	51.19	57.95
14th November, 1925	1,656,286	1,645,730	3,302,016	1,515,608	1,499,345	3,014,953	91.51	91.11	91.31
17th November, 1928	1,723,552	1,721,214	3,444,766	1,617,752	1,606,748	3,224,500	93.86	93.35	93.61
12th October, 1929	1,773,014	1,769,936	3,542,950	*	*	*	..	..	..
19th December, 1931	1,827,079	1,822,875	3,649,954	1,741,163	1,727,140	3,468,303	95.30	94.75	95.02
15th September, 1934	1,954,339	1,948,338	3,902,677	1,862,749	1,845,829	3,708,578	95.31	94.74	95.03

* No election.

THE HOUSE OF REPRESENTATIVES.

(CONTESTED ELECTORATES.)

16th December, 1922	1,306,020	1,378,254	2,774,274	920,177	726,686	1,646,863	65.91	52.72	59.36
14th November, 1925	1,635,842	1,632,897	3,268,739	1,499,006	1,488,194	2,987,200	91.63	91.14	91.39
17th November, 1928	1,450,202	1,463,951	2,914,153	1,362,675	1,366,137	2,728,812	93.96	93.32	93.64
12th October, 1929	1,557,525	1,560,505	3,118,030	1,479,100	1,478,447	2,957,547	94.96	94.74	94.85
19th December, 1931	1,724,730	1,733,343	3,458,073	1,643,604	1,642,870	3,286,474	95.30	94.78	95.04
15th September, 1934	1,930,418	1,934,021	3,864,439	1,843,949	1,833,774	3,677,723	95.52	94.82	95.17

The percentage of electors who exercised the franchise at each election rose from 53.04 for the Senate and 55.69 for the House of Representatives in 1901 to 77.69 and 78.30 respectively in 1917. The next election in 1919 showed a considerable falling off, and in 1922 the decrease was still more marked, the respective percentages for that year being 57.95 and 59.36, or very little more than those for 1901. Compulsory voting was introduced prior to the election in 1925, and an exceedingly heavy vote (over 91 per cent.) was cast in that year. At each succeeding election increases in percentage have been recorded.

4. Federal Referenda.—According to Section 128 of the Constitution, any proposed law for the alteration of the Constitution must, in addition to being passed by an absolute majority of each House of Parliament, be submitted to a referendum of the electors in each State, and must further be approved by a majority of the States and of the electors who voted before it can be presented for Royal Assent. Several referenda have been held from time to time, but in three cases only has any proposed law been assented to by the required majority of the electors. A statement dealing with the various referenda up to and inclusive of the year 1919, and the voting thereon was given in previous issues of the Official Year Book (see No. 18, pp. 87 to 89), but space will not permit of the incorporation of this information in the present volume. In the year 1926 a referendum was held in relation to proposed laws entitled respectively "Industry and Commerce" and "Essential Services." The result of the voting was: Industry and Commerce, votes in favour, 1,247,088; votes not in favour, 1,619,655. Essential Services, votes in favour, 1,195,502; votes not in favour, 1,597,793.

A referendum was taken in 1928 in respect of a proposed law entitled "State Debts 1928" and a majority of votes was cast in each State in favour of the proposal, the voting for the Commonwealth being as follows: in favour, 2,237,391; not in favour, 773,852.

On 6th March, 1937, proposals were submitted to the electors for the alteration of the Constitution in relation to "Aviation" and "Marketing" with the following results:—

State.	Votes in Favour.	Votes Not in Favour.	Informal Votes.
AVIATION.			
New South Wales	664,589	741,821	55,450
Victoria	675,481	362,112	36,685
Queensland	310,352	191,251	18,330
South Australia	128,582	191,831	21,031
Western Australia	100,326	110,529	10,977
Tasmania	45,616	71,518	7,882
Total	1,924,946	1,669,062	150,355
MARKETING.			
New South Wales	456,802	896,457	108,601
Victoria	468,337	537,021	68,920
Queensland	187,685	296,302	35,946
South Australia	55,364	248,502	27,578
Western Australia	57,023	148,308	16,501
Tasmania	24,597	87,798	12,621
Total	1,259,808	2,214,388	270,167

5. *The Parliament of New South Wales.*—(i) *Constitution.* The Parliament of New South Wales consists of two chambers, the Legislative Assembly and the Legislative Council. The Assembly consists of ninety members, elected in single seat electoral districts, who hold their seats during the existence of the Parliament to which they are elected. The duration of Parliament is limited to three years. Until recently the Council was a nominee chamber which might theoretically contain an unlimited number of members. An Act for the reformation of the Council by reducing and limiting the number of members was passed on the 16th December, 1932. This Act also provided for a referendum on the question which was taken on the 13th May, 1933, and resulted in favour of the proposed reforms. The reconstituted Council consists of 60 members ordinarily elected for a term of 12 years, with one-quarter of the members retiring every third year. The electorate comprises members of both chambers, who vote as a single electoral body at simultaneous sittings of both chambers. Ballots for the election of members of the first House were taken on the 2nd November, 1933, 16th November, 1933, 30th November, 1933, and the 14th December, 1933. On each occasion fifteen members were elected to serve respectively twelve years, nine years, six years, and three years. Any person resident for at least three years in the Commonwealth and entitled to vote at the election of members of the Legislative Assembly is eligible for election as a member of the Council, if nominated by two electors, an elector being a member of either of the two houses for the time being.

(ii) *Particulars of Elections.* Since the introduction of responsible government in New South Wales there have been thirty complete Parliaments, the first of which opened on the 22nd May, 1850, and was dissolved on the 19th December, 1857, while the thirtieth was dissolved on the 12th April, 1935. The thirty-first Parliament opened

on the 12th June, 1935. The elections of 1920, 1922 and 1925 were contested on the principle of proportional representation, but a reversion to the system of single seats and preferential voting was made at the later appeals to the people. Particulars of voting at elections from 1922 to 1935 are given below :—

LEGISLATIVE ASSEMBLY ELECTIONS, NEW SOUTH WALES.

Year.	Electors Qualified to Vote.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1922	636,662	614,361	1,251,023	466,949	408,515	875,464	73.34	66.49	69.98
1925	678,749	660,331	1,339,080	489,126	435,853	924,979	72.06	66.00	69.07
1927	714,886	694,607	1,409,493	591,820	558,957	1,150,777	83.79	81.25	82.54
1930	724,471	716,314	1,440,785	682,747	673,676	1,356,423	95.09	94.79	94.94
1932	730,009	725,999	1,456,008	690,094	676,993	1,367,087	90.42	96.37	96.30
1935	769,220	759,493	1,528,713	654,383	640,369	1,294,752	96.00	95.60	95.85

The principle of one elector one vote was adopted in 1894, and that of compulsory enrolment in 1921. Compulsory voting was introduced at the 1930 election, and, as the above table shows, the percentage of electors who voted in contested electorates rose to over 96 in 1932.

The franchise was extended to women (Women's Franchise Act) in 1902, and was exercised for the first time at a State election in 1904.

6. The Parliament of Victoria.—(i) *Constitution.* Both of the Victorian legislative chambers are elective bodies, but there is a considerable difference in the number of members of each House, as well as in the qualifications necessary for members and electors. The number of members in the Upper House is 34, and in the Lower House, 65. In the Legislative Council the tenure of the seat is for six years, but one member for each of the seventeen provinces retires every third year, except in the case of a dissolution, when one-half of the newly-elected members hold their seats for three years only. Members of the Legislative Assembly are elected for the duration of Parliament, which is limited to three years. An elector for the Legislative Assembly may vote once only, plurality of voting having been abolished in 1899; an elector, however, qualified in more than one district, may select the one for which he desires to record his vote. A preferential system of voting (see Year Book No. 6, page 1182) was adopted for the first time in Victoria at the election held in November, 1911.

(ii) *Particulars of Elections.* Since the introduction of responsible government in Victoria there have been thirty-one complete Parliaments, the first of which opened on the 21st November, 1856, and closed on the 9th August, 1859, while the thirty-first was dissolved on the 1st February, 1935. The thirty-second Parliament was opened on the 20th March, 1935. The election for the Legislative Assembly in 1927 was the first held since the institution of compulsory voting. At the Legislative Council elections held on the 9th June, 1934, only six of the seventeen seats were contested. Particulars of voting at elections during the years 1919 to 1935 are given in the subjoined table :

VICTORIAN ELECTIONS.

LEGISLATIVE COUNCIL.

Year.	Electors Enrolled.		Electors Enrolled in Contested Electorates.	Electors who Voted.	Percentage of Electors who Voted in Contested Electorates.
1919	317,593	133,058	40.35
1922	353,440	161,731	29.07
1925	399,510	172,875	32.41
1928	444,278	268,164	31.84
1931	470,349	239,975	38.86
1934	469,395	160,980	29.43

VICTORIAN ELECTIONS—*continued.*

LEGISLATIVE ASSEMBLY.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1921	414,818	456,638	871,456	167,812	158,415	326,227	61.29	53.53	57.26
1924	433,357	467,070	900,427	190,153	180,810	370,963	63.02	55.72	59.24
1927	480,485	512,726	993,211	377,941	402,458	780,399	92.02	91.51	91.76
1929	496,996	532,174	1,029,170	308,532	330,836	639,368	94.11	93.36	93.72
1932	510,809	544,492	1,055,301	335,512	351,530	687,042	94.60	93.82	94.20
1935	532,619	566,632	1,099,251	415,081	438,389	853,470	95.00	93.82	94.39

The franchise was extended to women by the Adult Suffrage Act 1908, while voting at elections was made compulsory for the Legislative Assembly in 1925 and for the Legislative Council in 1935.

7. *The Parliament of Queensland.*—(i) *Constitution.* As pointed out previously the Legislative Council in Queensland was abolished in 1922, the date of Royal Assent to the Act being the 23rd March, 1922. The Legislative Assembly is composed of sixty-two members, and the State is divided into that number of electoral districts. The Electoral Districts Act of 1931, assented to on the 1st October, 1931, provided, that from and after the end of the twenty-fifth Parliament (dissolved on the 19th April, 1932) the number of members and electoral districts should be reduced from seventy-two to sixty-two. A system of optional preferential voting is in operation. (*See Year Book No. 6, page 1183.*)

(ii) *Particulars of Elections.* Since the establishment of responsible government in Queensland there have been twenty-six complete Parliaments, the last of which was dissolved on the 9th April, 1935. Opinions differ regarding the opening date of the first Queensland Parliament. According to the Votes and Proceedings of the Legislative Assembly the House met for the first time on 22nd May, 1860, when the members were sworn and the Speaker elected. The Governor, however, was unable to be present on that date, but he duly attended on the 29th May, 1860, and delivered the Opening Address.

At the elections held in May, 1915, the principle of compulsory voting was introduced for the first time in Australia. Of the number of electors enrolled at the 1935 elections, 92.71 per cent. went to the polls. Statistics regarding elections during the years 1920 to 1935 are given below :—

QUEENSLAND LEGISLATIVE ASSEMBLY ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1920	238,750	206,931	445,681	187,575	168,651	356,226	78.57	81.50	79.93
1923	257,001	219,476	476,477	194,287	174,980	369,267	80.72	83.96	82.23
1926	253,571	224,526	478,097	209,139	191,916	401,055	89.77	90.13	89.94
1929	270,327	239,672	509,999	228,601	209,647	438,248	89.69	91.45	90.52
1932	274,986	250,958	525,944	236,266	220,628	456,894	92.59	93.14	92.86
1935	303,018	272,270	575,288	245,331	225,427	470,758	92.55	92.89	92.71

The election of 1907 was the first State election in Queensland at which women voted, the privilege being conferred under the Elections Acts Amendment Act 1905.

8. The Parliament of South Australia.—(i) *Constitution.* In this State there is a Legislative Council composed of twenty members and a House of Assembly with forty-six members, both chambers being elective. The State is divided into five districts, which return four members each to the Legislative Council. For the House of Assembly, eight districts return three members each, and eleven districts two members each.

(ii) *Particulars of Elections.* Since the inauguration of responsible government in South Australia there have been twenty-seven complete Parliaments, the first of which was opened on the 22nd April, 1857. The twenty-eighth Parliament opened on the 6th July, 1933. The duration of the present Parliament has been extended from three to five years by the Constitution (Quinquennial Parliament) Act 1933. Particulars of voting at the last six elections are given below :—

SOUTH AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1918	71,510	23,461	94,971	42,987	11,800	54,787	60.11	50.30	57.69
1921	69,986	23,062	93,048	38,597	11,309	49,906	64.23	53.96	61.57
1924	67,429	22,018	89,447	36,626	10,492	47,118	65.79	54.94	63.02
1927	100,376	37,395	137,771	46,686	17,742	64,428	67.55	59.91	65.26
1930	(a)	(a)	133,274	(a)	(a)	100,040	(a)	(a)	75.06
1933	(a)	(a)	133,152	(a)	(a)	25,309	(a)	(a)	64.21

LEGISLATIVE COUNCIL.

1918	71,510	23,461	94,971	42,987	11,800	54,787	60.11	50.30	57.69
1921	69,986	23,062	93,048	38,597	11,309	49,906	64.23	53.96	61.57
1924	67,429	22,018	89,447	36,626	10,492	47,118	65.79	54.94	63.02
1927	100,376	37,395	137,771	46,686	17,742	64,428	67.55	59.91	65.26
1930	(a)	(a)	133,274	(a)	(a)	100,040	(a)	(a)	75.06
1933	(a)	(a)	133,152	(a)	(a)	25,309	(a)	(a)	64.21

HOUSE OF ASSEMBLY.

1918	126,669	132,043	258,712	71,501	62,742	134,243	56.45	47.52	51.89
1921	134,091	137,931	272,022	91,451	77,600	169,051	70.10	57.64	63.77
1924	141,944	147,899	289,843	87,712	73,453	161,165	69.65	56.05	62.71
1927	152,997	156,591	309,588	110,127	104,611	214,738	80.64	74.31	77.43
1930	(a)	(a)	325,244	(a)	(a)	222,819	(a)	(a)	71.36
1933	(a)	(a)	338,576	(a)	(a)	182,693	(a)	(a)	59.45

(a) Not available.

South Australia was the first of the States to grant women's suffrage (under the Constitution Amendment Act 1894), the franchise being exercised for the first time at the Legislative Assembly election on the 25th April, 1896.

9. The Parliament of Western Australia.—(i) *Constitution.* In this State both Chambers are elective. For the Legislative Council there are thirty members, each of the ten Provinces returning three members, one of whom retires biennially. At each biennial election the member elected holds office for a term of six years, and automatically retires at the end of that period. The Legislative Assembly is composed of fifty members, one member being returned by each of the fifty electoral districts. Members of the Legislative Assembly are elected for three years.

(ii) *Particulars of Elections.* Since the establishment of responsible government in Western Australia there have been fifteen complete Parliaments, the first of which was opened on the 30th December, 1890, while the sixteenth Parliament was elected on the 15th February, 1936. The preferential system of voting in use in Western Australia is described in Year Book No. 6, page 1184. Particulars relating to more recent Assembly and Council elections are given in the tables following.

WESTERN AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
LEGISLATIVE COUNCIL.									
1926	39,566	15,120	54,686	23,956	8,136	32,092	60.55	53.80	58.68
1928	54,822	19,076	73,898	24,877	8,151	33,028	51.99	46.75	50.59
1930	54,651	18,927	73,578	20,198	6,252	26,450	51.58	48.50	50.81
1932	57,454	19,889	77,343	17,145	5,508	22,653	56.29	48.29	54.16
1934	62,168	22,323	84,491	31,590	10,189	41,779	53.39	47.23	51.75
1936	63,407	21,987	85,394	18,479	6,394	24,873	45.03	40.03	43.62

LEGISLATIVE ASSEMBLY.

1921	89,523	75,165	164,688	54,747	44,211	98,958	69.16	65.22	67.34
1924	101,717	88,152	189,869	55,591	43,800	99,391	66.00	59.00	62.32
1927	113,072	97,877	210,949	76,307	66,199	142,506	74.32	72.42	73.42
1930	122,576	107,500	230,076	75,206	63,807	139,013	75.44	73.30	74.44
1933	124,776	112,419	237,195	96,210	89,802	186,012	90.23	91.00	90.60
1936	130,065	117,400	247,465	71,734	64,575	136,309	71.95	68.22	70.13

Women's suffrage was granted by the Electoral Act of 1899. The first woman member to be elected to an Australian Parliament was returned at the 1921 election in this State. Voting for the Legislative Assembly was made compulsory in December, 1936.

(iii) *Secession Referendum.* Under the provisions of the Secession Referendum Act, 1932, a referendum was taken on the 8th April, 1933, when the following questions were submitted to the electors :—

- (1) "Are you in favour of the State of Western Australia withdrawing from the Federal Commonwealth established under the Commonwealth of Australia Constitution Act (Imperial)?"
- (2) "Are you in favour of a Convention of Representatives of equal number from each of the Australian States being summoned for the purpose of proposing such alterations in the Constitution of the Commonwealth as may appear to such Convention to be necessary?"

The result of the voting was: Secession, votes in favour, 138,653; votes not in favour, 70,706. Convention, votes in favour, 88,275; votes not in favour, 119,031.

10. *The Parliament of Tasmania.*—(i) *Constitution.* In Tasmania there are two legislative chambers—the Legislative Council and the House of Assembly, both bodies being elective. The Council consists of eighteen members, elected for six years and returned from fifteen districts, Hobart returning three, Launceston two, and the remaining thirteen districts sending one member each. Three members retire annually, and the Council cannot be dissolved as a whole. There are five House of Assembly districts, corresponding to the Commonwealth electoral divisions, each returning six members, who are elected under a system of proportional representation which first came into force at the 1920 elections (*see* Year Book No. 6, page 1185). The life of the Assembly was extended from three to five years by the Constitution Act 1936.

In 1924 and again in 1925 the House of Assembly contested, with at least temporary success, the power of the Legislative Council to amend money bills. The matter was settled by The Constitution Act 1920, which provides that all money bills shall originate in the Assembly, that all money votes shall be recommended by the Governor, and that the Council may amend bills other than those for appropriating public moneys or fixing

a rate for income or land tax. The Council has no power to insert a provision for the appropriation of money or to impose or increase any burden on the people.

(ii) *Particulars of Elections.* The first Tasmanian Parliament opened on 2nd December, 1856, and closed on 8th May, 1861. There have been twenty-five complete Parliaments since the inauguration of responsible government. Particulars of the voting at the last six elections for the House of Assembly are given hereunder :—

TASMANIAN ELECTIONS, HOUSE OF ASSEMBLY.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1922	54,958	55,591	110,549	38,457	31,295	69,752	69.96	56.30	63.09
1925	56,667	58,234	114,901	41,322	35,959	77,281	72.92	61.81	67.25
1928	55,058	56,898	111,956	46,769	44,910	91,679	84.94	78.94	81.90
1931	59,024	59,706	118,730	56,674	56,105	112,779	96.02	93.97	94.99
1934	63,841	63,840	127,681	60,623	59,999	120,622	94.96	93.98	94.47
1937	66,223	65,778	132,001	62,880	61,580	124,460	94.95	93.62	94.29

The present members of the Legislative Council have been elected at various dates and the following particulars are given of the last contested election in each case :— Number of electors on the roll, 46,747 ; number of votes recorded, male 23,646, female 7,510, total 31,156 ; percentage of persons who voted to the number on the roll, 66.64.

The suffrage was granted to women under the Constitution Amendment Act 1903 and compulsory voting came into force on the passing of the Electoral Act in 1928.

§ 3. Administration and Legislation.

1. *The Commonwealth Parliaments.*—The first Parliament of the Commonwealth was convened by proclamation dated 29th April, 1901, by His Excellency the late Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on the 9th May following by H.R.H. the Duke of Cornwall and York, who had been sent to Australia for that purpose by His Majesty the King, the Rt. Hon. Sir Edmund Barton, G.C.M.G., K.C., being Prime Minister.

The following table gives the number and duration of Parliaments since Federation :—

COMMONWEALTH PARLIAMENTS.

Number of Parliament.			Date of Opening.		Date of Dissolution.	
First	..	..	9th May, 1901	..	23rd November, 1903	
Second	..	..	2nd March, 1904	..	5th November, 1906	
Third	..	..	20th February, 1907	..	19th February, 1910	
Fourth	..	..	1st July, 1910	..	23rd April, 1913	
Fifth	..	..	9th July, 1913	..	30th July, 1914 (a)	
Sixth	..	..	8th October, 1914	..	23rd March, 1917	
Seventh	..	..	14th June, 1917	..	31st October, 1919	
Eighth	..	..	26th February, 1920	..	6th November, 1922	
Ninth	..	..	28th February, 1923	..	3rd October, 1925	
Tenth	..	..	13th January, 1926	..	9th October, 1928	
Eleventh	..	..	9th February, 1929	..	16th September, 1929	
Twelfth	..	..	20th November, 1929	..	27th November, 1931	
Thirteenth	..	..	17th February, 1932	..	7th August, 1934	
Fourteenth	..	..	23rd October, 1934	..	..	..

(a) On this occasion, the Governor-General, acting on the advice of the Ministry, and under section 57 of the Constitution, granted a dissolution of both the Senate and the House of Representatives, this being the first occasion since Federation on which a dissolution of both Houses had occurred.

2. **Governors-General and Ministries.**—The following statements show the names of the several Governors-General, and the Ministries which have directed the administration of the affairs of the Commonwealth since its creation:—

(a) **GOVERNORS-GENERAL.**

- Rt. Hon. EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), K.T., G.C.M.G., G.C.V.O. From 1st January, 1901, to 9th January, 1903.
 Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 17th July, 1902, to 9th January, 1903 (Acting).
 Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 9th January, 1903, to 21st January, 1904.
 Rt. Hon. HENRY STAFFORD, BARON NORTHCOTE, G.C.M.G., G.C.I.E., C.B. From 21st January, 1904, to 9th September, 1908.
 Rt. Hon. WILLIAM HUMBLE, EARL OF DUDLEY, G.C.B., G.C.M.G., G.C.V.O., &c. From 9th September, 1908, to 31st July, 1911.
 Rt. Hon. THOMAS, BARON DENMAN, G.C.M.G., K.C.V.O. From 31st July, 1911, to 18th May, 1914.
 Rt. Hon. SIR RONALD CRAUFURD MUNRO FERGUSON (afterwards VISCOUNT NOVAR OF BAITH), G.C.M.G. From 18th May, 1914, to 6th October, 1920.
 Rt. Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, G.C.M.G. From 6th October, 1920, to 8th October, 1925.
 Rt. Hon. JOHN LAWRENCE, BARON STONEHAVEN, G.C.M.G., D.S.O. From 8th October, 1925, to 22nd January, 1931.
 Lieut.-Colonel the Rt. Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C. From 3rd October, 1930, to 22nd January, 1931 (Acting).
 Rt. Hon. SIR ISAAC ALFRED ISAAI, G.C.M.G. From 22nd January, 1931, to 22nd January, 1936.
 Brig.-General the Rt. Hon. ALEXANDER GORR ARKWRIGHT, BARON GOWRIE, V.C., P.C., G.C.M.G., C.B., D.S.O. From 23rd January, 1936.

(b) **MINISTRIES.**

- (i) BARTON MINISTRY, 1st January, 1901, to 24th September, 1903.
 (ii) DEAKIN MINISTRY, 24th September, 1903, to 27th April, 1904.
 (iii) WATSON MINISTRY, 27th April to 17th August, 1904.
 (iv) REID-MCLEAN MINISTRY, 17th August, 1904, to 5th July, 1905.
 (v) DEAKIN MINISTRY, 5th July, 1905, to 13th November, 1908.
 (vi) FISHER MINISTRY, 13th November, 1908, to 2nd June, 1909.
 (vii) DEAKIN MINISTRY, 2nd June, 1909, to 29th April, 1910.
 (viii) FISHER MINISTRY, 29th April, 1910, to 24th June, 1913.
 (ix) COOK MINISTRY, 24th June, 1913, to 17th September, 1914.
 (x) FISHER MINISTRY, 17th September, 1914, to 27th October, 1915.
 (xi) HUGHES MINISTRY, 27th October, 1915, to 14th November, 1916.
 (xii) HUGHES MINISTRY, 14th November, 1916, to 17th February, 1917.
 (xiii) HUGHES MINISTRY, 17th February, 1917, to 10th January, 1918.
 (xiv) HUGHES MINISTRY, 10th January, 1918, to 9th February, 1923.
 (xv) BRUCE-PAGE MINISTRY, 9th February, 1923, to 22nd October, 1929.
 (xvi) SCULLIN MINISTRY, 22nd October, 1929, to 6th January, 1932.

(c) **LYONS GOVERNMENT, from 6th January, 1932.**

DEPARTMENTS.	MINISTERS (1937).
Prime Minister and Vice-President of the Executive Council	The Rt. Hon. JOSEPH ALOYSIUS LYONS, C.H.
Minister for Commerce	The Rt. Hon. EARLE CHRISTMAS GRAFTON PAGE.
Minister for External Affairs and Minister-in-Charge of Territories	Senator the Rt. Hon. SIR GEORGE FOSTER PEARCE, K.C.V.O.
Attorney-General and Minister for Industry	The Rt. Hon. ROBERT GORDON MENZIES, K.C.
Minister for Defence	The Hon. SIR ARCHDALE PARKHILL, K.C.M.G.
Minister for Repatriation and Minister for Health	The Rt. Hon. WILLIAM MORRIS HUGHES, K.C.
Minister for the Interior	The Hon. THOMAS PATERSON.
Postmaster-General and Minister-in-Charge of Development, and Scientific and Industrial Research	Senator the Hon. ALEXANDER JOHN McLACHLAN.
Minister for Trade and Customs	The Hon. THOMAS WALTER WHITE, D.F.C., V.D.
Treasurer	The Hon. RICHARD GARDINER CASEY, D.S.O., M.C.
Ministers without Portfolios	Senator the Hon. THOMAS CORNELIUS BRENNAN, K.C. The Hon. HAROLD VICTOR CAMPBELL THORBY. The Hon. JAMES AITCHISON JOHNSTON HUNTER.

3. **State Ministries.**—The names of the members of the Ministries in each State in August, 1937, are shown in the following statement. The date on which each Ministry was sworn in is stated in parentheses :—

**STATE MINISTRIES, 1937.
NEW SOUTH WALES (16th May, 1932).**

<i>Premier and Colonial Treasurer—</i> HON. B. S. B. STEVENS.	<i>Minister for Labour and Industry—</i> HON. J. M. DUNNINGHAM.
<i>Deputy Premier and Minister for Transport—</i> LIEUT.-COL. THE HON. M. F. BRUXNER, D.S.O.	<i>Minister for Agriculture—</i> HON. H. MAIN.
<i>Attorney-General and Vice-President of the Executive Council—</i> HON. H. E. MANNING, K.C., M.L.C.	<i>Assistant Minister in the Legislative Council—</i> HON. J. RYAN, M.L.C.
<i>Minister for Local Government and Secretary for Public Works—</i> HON. E. S. SPOONER.	<i>Secretary for Mines and Minister for Forests—</i> HON. R. S. VINCENT.
<i>Secretary for Lands—</i> HON. E. A. BUTTENSCHAW.	<i>Minister of Justice—</i> HON. L. O. MARTIN.
<i>Colonial Secretary—</i> CAPT. THE HON. F. A. CHAFFEY.	<i>Minister for Health—</i> HON. H. P. FITZSIMONS.
<i>Minister for Education—</i> HON. D. H. DRUMMOND.	<i>Minister for Social Services—</i> HON. H. M. HAWKINS, M.L.C.
	<i>Ministers without Portfolio—</i> MAJOR THE HON. J. B. SHAND, V.D. HON. C. A. SINCLAIR.

VICTORIA (2nd April, 1935).

<i>Premier and Treasurer—</i> HON. A. A. DUNSTAN.	<i>Chief Secretary—</i> HON. H. S. BAILEY.
<i>Minister of Water Supply, and Minister-in-Charge of Electrical Undertakings—</i> HON. F. E. OLD.	<i>Minister of Labour—</i> HON. E. J. MACKRELL.
<i>Minister of Agriculture, Minister of Mines, and a Vice-President of the Board of Land and Works—</i> HON. E. J. HOGAN.	<i>Minister of Public Instruction and Minister of Public Health—</i> HON. SIR JOHN HARRIS, K.B.E., M.L.C.
<i>President of the Board of Land and Works, Commissioner of Crown Lands and Survey, and Minister of Forests—</i> HON. A. E. LIND.	<i>Commissioner of Public Works, Minister-in-Charge of Immigration, and a Vice-President of the Board of Land and Works—</i> HON. G. L. GOUDIE, M.L.C.
<i>Minister of Transport, Attorney-General, Solicitor-General, and a Vice-President of the Board of Land and Works—</i> HON. A. L. BUSSAU.	<i>Ministers without Portfolios—</i> HON. G. J. TUCKETT, M.L.C. HON. H. PYE, M.L.C. HON. H. J. T. HYLAND.

QUEENSLAND (17th June, 1932). (Labour.)

<i>Premier, Chief Secretary and Treasurer—</i> HON. W. FORGAN SMITH.	<i>Secretary for Public Instruction—</i> HON. F. A. COOPER.
<i>Secretary for Public Lands—</i> HON. P. PEASE.	<i>Secretary for Agriculture and Stock—</i> HON. F. W. BULCOCK.
<i>Secretary for Labour and Industry—</i> HON. M. P. HYNES.	<i>Secretary for Health and Home Affairs—</i> HON. E. M. HANLON.
<i>Attorney-General—</i> HON. J. MULLAN.	<i>Minister for Transport—</i> HON. J. DASH.
<i>Secretary for Public Works—</i> HON. H. A. BRUCE.	<i>Secretary for Mines—</i> HON. T. A. FOLEY.

SOUTH AUSTRALIA (18th April, 1933).

<i>Premier, Treasurer, and Minister of Immigration—</i> HON. R. L. BUTLER.	<i>Commissioner of Crown Lands, Minister of Repatriation, Minister of Irrigation, and Minister of Afforestation—</i> HON. M. McINTOSH.
<i>Chief Secretary, Minister of Mines, and Minister of Health—</i> HON. SIR GEORGE RITCHIE, K.C.M.G., M.L.C.	<i>Commissioner of Public Works, Minister of Railways, and Minister of Marine—</i> HON. SIR HERBERT SYDNEY HUDD, K.B.E., M.C.
<i>Attorney-General, Minister of Education, and Minister of Industry and Employment—</i> HON. S. W. JEFFRIES.	<i>Minister of Agriculture and Minister of Local Government—</i> HON. A. P. BLESING, M.L.C.

WESTERN AUSTRALIA (15th February, 1936). (Labour.)

<i>Premier, Treasurer and Minister for Forests—</i> HON. J. C. WILLOCK.	<i>Minister for Agriculture, Education and Police—</i> HON. F. J. S. WISE.
<i>Minister for Lands and Immigration—</i> HON. M. F. TROY.	<i>Minister for Employment and Labour—</i> HON. A. R. G. HAWKE.
<i>Minister for Mines and Health—</i> HON. S. W. MUNSBIE.	<i>Chief Secretary—</i> HON. W. H. KITSON, M.L.C.
<i>Minister for Works and Water Supplies—</i> HON. H. MILLINGTON.	<i>Minister for Justice and Railways—</i> HON. F. C. L. SMITH.
	<i>Honorary Minister—</i> HON. E. H. GRAY, M.L.C.

TASMANIA (22nd June, 1934). (Labour.)

<i>Premier (Without Portfolio)—</i> HON. A. G. OGILVIE, K.C.	<i>Minister for Lands, Works and Mines—</i> HON. T. H. DAVIES, D.S.O., M.C., R.E.
<i>Treasurer—</i> HON. E. DWYER-GRAY.	<i>Minister for Agriculture, Forestry and Agricultural Bank—</i> HON. R. COSGROVE.
<i>Attorney-General and Minister for Education—</i> HON. E. J. OGILVIE.	<i>Honorary Ministers—</i> HON. J. F. GAHA, M.L.C.
<i>Chief Secretary and Minister for Transport and Health—</i> HON. T. G. de L. D'ALTON.	HON. J. McDONALD, M.L.C.

4. *The Course of Legislation.*—The actual legislation by the Commonwealth Parliament up to the end of the 1930 session is indicated in alphabetical order in "Vol. XXXIV. of the Acts of the Parliament of the Commonwealth of Australia, passed during the year 1930, with Tables, Appendix and Indexes." A "Chronological Table of Acts passed from 1901 to 1930, showing how they are affected by subsequent legislation or lapse of time" is also given, and further "A Table of Commonwealth Legislation," for the same period, "in relation to the several provisions of the Constitution," is furnished. Reference should be made to these for complete information. In previous issues of the

Official Year Book an analytic table was included showing the nature of Commonwealth legislation in force at the end of the latest year available. A classification of legislation, according to its relation to the several provisions of the Constitution, up to the end of the year 1928 will be found in No. 22, pp. 76 to 84.

§ 4. Cost of Parliamentary Government.

The following statement shows the cost of parliamentary government in the Commonwealth and in each State, as well as the cost per head of population, for the year ended 30th June, 1936. In order to avoid incorrect conclusions as to the cost of the Governor-General's or Governor's establishment, it may be pointed out that a very large part of the expenditure (with the exception of the item "Governor's salary") under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interests, and carried out at the request of the Government.

COST OF PARLIAMENTARY GOVERNMENT, 1935-36.

Particulars.	C'wlth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
1. <i>Governor-General or Governor—</i>	£	£	£	£	£	£	£	£
Governor's salary ..	9,882	4,259	5,000	2,850	5,000	2,000	2,625	31,616
Other salaries ..	758	3,231	686	1,509	752	783	554	8,273
Other expenses, including maintenance of house and grounds ..	34,874	3,043	4,408	4,456	2,693	2,830	1,127	53,431
Total ..	45,514	10,533	10,094	8,815	8,445	5,613	4,306	93,320
2. <i>Executive Council—</i>								
Salaries of Officers ..	(d)	337	454	27	..	345	(e)	1,163
Other expenses ..	(d)	38	65	60	..	..	(e)	163
Total ..	(d)	375	519	87	..	345	(e)	1,326
3. <i>Ministry—</i>								
Salaries of Ministers ..	13,260	16,924	8,550	10,306	6,200	7,365	4,875	67,480
Travelling expenses ..	1,969	..	(f)	..	..	3,384	2,086	7,439
Other ..	993	6,365	(f)	..	..	..	..	7,358
Total ..	16,222	23,289	8,550	10,306	6,200	10,749	6,961	82,277
4. <i>Parliament—</i>								
A. <i>Upper House :</i>								
President and Chairman of Committees ..	1,476	1,511	1,002	..	680	1,678	225	6,572
Allowance to members ..	29,549	..	5,804	..	6,033	15,842	5,784	63,122
Railway passes ..	5,760	11,301	9,000	..	1,212	4,516	1,071	32,860
Postage for members ..	1,990	40	150	..	42	110	(f)	2,332
B. <i>Lower House :</i>								
Speaker and Chairman of Committees ..	1,005	4,356	1,000	1,031	1,000	1,780	262	10,106
Allowance to members ..	61,685	52,392	25,699	26,703	14,400	26,762	8,878	216,510
Railway passes ..	12,000	18,012	(f)	13,015	2,788	9,505	1,786	57,100
Postage for members ..	3,880	2,699	800	2,514	306	300	(f)	10,490
Carried forward, Parliament	117,945	88,011	44,363	43,866	26,716	60,299	18,006	399,206

COST OF PARLIAMENTARY GOVERNMENT—continued.

Particulars.	C'wlth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
4. <i>Parliament</i> —continued.	£	£	£	£	£	£	£	£
Brought forward ..	117,945	88,011	44,363	43,866	26,716	60,290	18,006	399,206
C. <i>Both Houses :</i>								
Standing Committee on Public Works—								
Remuneration of members ..	..	..	..	..	1,595	..	637	2,232
Salaries of staff and contingencies ..	..	592	..	..	1,087	..	45	1,724
Printing—								
<i>Hansard</i> ..	9,948	4,741	5,034	2,417	2,557	1,922	..	26,619
Other ..	13,127	9,487	3,948	1,141	6,256	373	4,556	39,388
Parliamentary reporting staff—								
Salaries ..	10,320	7,479	5,506	2,405	5,072	4,457	..	36,220
Contingencies ..	243	165	26	..	257	95	..	780
Library—								
Salaries ..	5,294	2,622	2,102	1,004	780	45	..	11,847
Contingencies ..	2,119	911	425	708	290	215	86	4,754
Salaries of other officers and staff ..	25,841	22,107	13,034	6,500	6,222	6,396	3,348	83,508
Other ..	11,594	162	6	..	242	240	..	12,244
D. <i>Miscellaneous</i> —								
Fuel, light, heat, power, water ..	2,425	743	1,286	754	1,063	168	..	6,339
Posts, telegraphs, telephones ..	1,228	3,188	771	771	689	290	..	6,867
Furniture, stores, and stationery ..	3,989	1,166	1,171	407	1,379	100	893	96,096
Other ..	62,197	1,949	104	5,739	2,071	2,326	..	71,462
Total ..	266,270	143,314	77,095	65,772	57,176	77,426	27,571	714,624
3. <i>Electoral</i> —								
Salaries ..	73,393	2,100	1,118	2,757	2,634	2,667	(e)	84,669
Cost of elections, contingencies, etc. ..	24,610	3,182	6,784	7,706	1,574	14,602	1,520	60,068
Total ..	98,003	5,282	7,902	10,553	4,208	17,269	1,520	144,737
6. <i>Royal Commissions, Select Committees, etc.</i> , including fees and other expenses of Commissioners, fees of counsel, costs incurred by Ministers, cost of overtime worked by Departments preparing information, bonuses, etc. ..	17,835	7,110	4,288	2,874	2,365	1,681	..	36,153
Total ..	17,835	7,110	4,288	2,874	2,365	1,681	..	36,153
GRAND TOTAL ..	443,844	180,003	108,448	98,407	78,394	113,083	40,358	1,072,437
Cost per head of population ..	18. 4d.	18. 5d.	18. 2d.	28. 0d.	28. 8d.	58. 1d.	38. 6d.	38. 2d.

(a) Including rent of buildings at Melbourne, £5,277; interest and sinking fund on loans, £4,319; and non-recurring works, £17,374. (b) Governor, £2,706; Lieut.-Governor, £1,463. (c) Salary of Lieut.-Governor. (d) Included under Governor-General. (e) Duties performed by Chief Secretary's Department. (f) Not available separately. (g) Includes interest and sinking fund, Parliament House, Canberra, £12,243; and maintenance of members' rooms in capital cities, £8,202. (h) Both Houses. (i) Included with Upper House. (j) Net total. (k) Includes interest and sinking fund, Parliament House, £013.

Figures showing total cost and cost per head during each of the last five years are given in the next table.

COST OF PARLIAMENTARY GOVERNMENT.

Year.	C'with.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
TOTAL.								
	£	£	£	£	£	£	£	£
1931-32 ..	480,857	219,327	117,050	134,541	78,520	91,331	33,239	1,154,865
1932-33 ..	366,862	231,148	99,917	95,102	81,350	61,274	32,512	902,543
1933-34 ..	389,937	188,728	98,721	92,763	74,420	94,249	37,909	976,727
1934-35 ..	535,162	223,513	126,742	126,741	81,471	92,884	40,277	1,226,790
1935-36 ..	143,811	18,000	108,118	98,107	78,394	113,083	40,158	1,072,437

PER HEAD OF POPULATION.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1931-32 ..	1 6	1 8	1 3	2 11	2 9	4 3	2 11	3 0
1932-33 ..	1 1	1 10	1 0	2 0	2 10	4 4	2 10	3 0
1933-34 ..	1 2	1 6	1 1	1 11	2 7	4 3	3 4	2 11
1934-35 ..	1 7	1 8	1 5	2 8	2 9	4 2	3 6	3 8
1935-36 ..	1 4	1 5	1 2	2 0	2 8	5 1	3 6	3 2

§ 5. Government Employees.

The proportion of Government employees in Australia is high compared with most countries, inasmuch as Australian Governments undertake many services such as railways, tramways, the provision of water, electric light, etc., which in other countries are left to private enterprise. At the 30th June, 1936, the number of persons so employed amounted to 330,933. Included in this total are temporary, exempt, part-time and relief workers as well as employees of statutory bodies administering works and services on behalf of the Governments. The staffs of the Commonwealth and the State Banks have also been included. Details of employment by the various Governments are as follows:—

GOVERNMENT EMPLOYEES AT 30th JUNE, 1936.

Employed by—	Transport.	Postal.	Construction.	Teachers.	Other.	Total.
Commonwealth ..	1,514	(a) 44,443	(b)	..	20,368	66,325
New South Wales ..	50,502	..	(c) 16,708	12,315	25,265	104,790
Victoria ..	27,563	..	7,601	8,533	20,866	64,053
Queensland ..	18,526	..	3,606	4,310	9,880	36,382
South Australia ..	8,778	..	3,083	3,218	8,205	23,284
Western Australia ..	9,167	..	6,957	2,310	7,631	26,095
Tasmania ..	1,968	..	3,193	1,307	2,036	8,504
Australia ..	118,018	44,443	41,298	32,023	94,251	330,933

(a) Including 14,908 non-official post office employees and mail contractors. (b) Not available separately. (c) Including 719 temporary and 3,600 relief workers who were rationed and standing off the pay sheet on 30th June, 1936.

Particulars are not available in all cases regarding the sexes of part-time workers, but with their exclusion and that of relief workers, the remainder—consisting of permanent, temporary and exempt employees—was composed of 230,381 males and 15,144 females, or about one female to every five males.

§ 6. Consular Representatives of Foreign Countries in Australia.

The following tabular statement shows the number of consular representatives of foreign countries in each State for the year 1937:—

CONSULAR REPRESENTATIVES IN AUSTRALIA, 1937.

Country.	Number of Consular Representatives in—						
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total, Aust.
Argentine Republic	1	2	1	1	..	1	6
Austria	1	1	..	..	..	..	2
Belgium	3	1	1	1	1	1	8
Brazil	2	2	..	..	..	..	4
Chile	1	1	..	..	..	..	2
China	2	..	..	..	..	..	2
Colombia	1	1	..	..	..	..	2
Costa Rica	1	..	..	..	..	..	1
Czechoslovakia	2	1	1	1	1	..	6
Denmark	2	2	3	2	2	1	12
Dominican Republic	1	1	..	..	..	..	2
Ecuador	2	..	..	..	..	..	2
Estonia	1	..	..	..	..	..	1
Finland	1	1	1	1	..	..	4
France.. ..	3	1	1	1	1	1	8
Germany	2	2	1	..	1	..	6
Greece	2	2	1	2	2	..	9
Honduras	2	..	..	..	..	..	2
Italy	3	1	3	1	1	1	10
Japan	3	2	1	1	1	..	8
Latvia	1	1	1	1	..	..	4
Liberia .. ..	..	..	..	1	..	..	1
Mexico	1	..	..	..	..	..	1
Netherlands	3	1	4	1	1	1	12
Nicaragua	1	..	..	..	..	..	1
Norway	3	2	1	3	4	2	18
Panama	1	1	1	..	..	..	3
Paraguay	1	..	..	..	1	..	2
Peru	1	1	..	1	..	..	3
Poland	1	1	..	..	..	..	2
Portugal	1	1	1	1	1	..	5
Rumania	1	..	..	..	..	..	1
Salvador .. ..	..	1	..	..	..	..	1
Siam	1	..	..	..	..	..	1
Spain	1	1	1	1	1	..	5
Sweden	3	2	3	3	1	1	13
Switzerland	1	1	1	..	..	..	3
United States of America	5	3	1	1	..	..	10
Uruguay	1	1	..	..	..	..	2
Venezuela	1	..	..	..	..	..	1
Yugoslavia	1	1	..	..	1	..	3
Total	65	39	31	24	20	9	189a

(a) In addition, Northern Territory has a Consul for the Netherlands.

Countries having Consuls-General in Sydney are Belgium, Chile, China, Costa Rica, Czechoslovakia, Denmark, Ecuador, France, Germany, Greece, Honduras, Italy, Japan, Netherlands, Nicaragua, Norway, Paraguay, Poland, Siam, Spain, Sweden and United States. Those having Consuls-General in Melbourne are Argentine Republic and Peru.

Particulars of the names and addresses of the various Consular representatives, as well as their rank and year of appointment, are contained in a publication issued by the Department of External Affairs, Canberra, entitled "List of Consular Representatives of Foreign Countries in Australia and Territories under its Administration."

CHAPTER IV. LAND TENURE AND SETTLEMENT.

§ 1. Introduction.

1. **General.**—A comprehensive description of the land tenure systems of the several States was given in Official Year Book No. 4 (pp. 235 to 333), while later alterations were referred to in subsequent issues. In this chapter a summary is given of the principal features of existing land legislation. In previous issues an account of the various tenures under which Crown lands may be taken up was given. (*See Year Book No. 22, pp. 133-195; also par. 2 hereunder for a conspectus of legislation at present in force.*) Special sections are devoted to closer settlement, the settlement of returned soldiers on the land and advances to settlers. Particulars as to the areas of land alienated in each State and similar matter are also included.

2. **State Land Legislation.**—The legislation in force relating to Crown lands, Closer Settlement, Returned Soldiers' Settlement and other matters dealt with in this chapter is summarized in the following conspectus:—

STATE LAND LEGISLATION.

New South Wales.	Victoria.	Queensland.
CROWN LANDS ACTS.		
Crown Lands Act 1913-1935; Western Lands Act 1901-1936; Prickly Pear Act 1924-1934.	Land Acts 1928-1935: Land (Crown Leases Adjustment) Act 1936	Land Acts 1910-1936: Upper Burnett and Callide Land Settlement Act 1923-1932; Prickly Pear Land Acts 1923- 1936: Sugar Workers' Selec- tions Acts 1923-1936.

CLOSER SETTLEMENT ACTS.

Closer Settlement Act 1904-1935: Closer Settlement and Re- turned Soldiers' Settlement (Amendment) Act 1927-1935.	Closer Settlement Acts 1928- 1934.	Closer Settlement Acts 1906- 1934.
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MINING ACTS.

Mining Act 1906-1935: Mining Leases (Validation) Act 1924.	Mines Act 1928: Mines (Petro- leum) Act 1935.	Mining Acts 1898-1930: Mining for Coal and Mineral Oil Act 1912: Petroleum Acts 1923- 1929: Miners' Homestead Leases Act 1913-1930: Coal Mining Act 1925-1930.
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SOLDIERS' SETTLEMENT ACTS.

Returned Soldiers' Settlement Act 1916-1935.	Closer Settlement Acts 1928- 1934.	Discharged Soldiers' Settlement Act 1917-1932.
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ADVANCES TO SETTLERS ACTS.

Government Savings Bank Act 1906-1932: Returned Soldiers' Settlement Act 1916-1935: Rural Bank Agency Act 1934.	State Savings Bank Acts 1915- 1922: Primary Products Ad- vances Acts 1919-1922: Closer Settlement Acts 1928-1934: Fruit and Vegetable Act 1928: Cultivation Advances Acts 1931-1934: Farmers Advances Act 1935.	State Advances Acts 1916-1934: Co-operative Agricultural Pro- duction and Advances to Farmers Acts 1914-1919: Agri- cultural Bank Acts 1923-1934: Farmers' Assistance (Debts Adjustment) Acts 1935-1936: Income (Unemployment Re- lief) Tax Acts 1930-1935.
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STATE LAND LEGISLATION—*continued.*

South Australia.	Western Australia.	Tasmania.
CROWN LANDS ACTS.		
Crown Lands Act 1929-1936 : Pastoral Act 1904-1935.	Land Act 1933-1936.	Crown Lands Act 1935.
CLOSER SETTLEMENT ACTS.		
Crown Lands Act 1929-1936.	Closer Settlement Act 1927.	Closer Settlement Act 1929.
MINING ACTS.		
Mining Act 1930-1931.	Mining Act 1904-1933 : Sluicing and Dredging for Gold Act 1899.	Mining Act 1917-1929 : Aid to Mining Act 1924.
SOLDIERS' SETTLEMENT ACTS.		
Discharged Soldiers' Settlement Act 1917-1935.	Discharged Soldiers' Settlement Act 1918.	Closer Settlement Act 1929.
AGRICULTURAL GRADUATES SETTLEMENT ACTS.		
Agricultural Graduates Act 1922.		
ADVANCES TO SETTLERS ACTS.		
Irrigation Act 1930-1933 : Dis- charged Soldiers' Settlement Act 1917-1935 : State Bank Act 1925-1935 : Advances to Settlers Act 1930 : Agri- cultural Graduates Act 1922 : Loans for Fencing and Water Piping Act 1930-1935.	Agricultural Bank Act 1934.	State Advances Act 1935 : Closer Settlement Act 1929 : Un- employed (Assistance to Primary Producers) Relief Act 1930-1934 : Farmers Debt Adjustment Act 1935

3. Northern Territory Land Legislation.—In the Northern Territory of Australia the legislation relating to Crown lands is embodied in the Crown Lands Ordinance 1931-1935 : that relating to mining in the Northern Territory Mining Act 1903, the Mining Ordinance 1927-1936, the Gold Dredging Act 1800, the Tin Dredging Ordinance 1911-1920, the Mineral Oil and Coal Ordinance 1922-1923, and the Encouragement of Mining Ordinance 1913-1926 : and that relating to advances to settlers in the Encouragement of Primary Production Ordinance 1931-1934.

4. Federal Capital Territory Land Legislation.—In the Federal Capital Territory the Ordinances relating to Crown lands are the Leases Ordinance 1918-1930, the City Area Leases Ordinances 1936, the Church Lands Leases Ordinance 1924-1932, and the Leases (Special Purposes) Ordinance 1925-1936.

5. **Administration and Classification of Crown Lands.**—In each of the States there is a Lands Department under the direction of a responsible Cabinet Minister who is charged generally with the administration of the Acts relating to the alienation, occupation and management of Crown lands. The administrative functions of most of the Lands Departments are to some extent decentralized by the division of the States into what are usually termed Land Districts, in each of which there is a Lands Office, under the management of a Lands officer, who deals with applications for selections and other matters generally appertaining to the administration of the Acts within the particular district. In some of the States there is also a local Land Board or a Commissioner for each district or group of districts. In the Northern Territory the Land Board, under the control of the Minister for the Interior, is charged with the general administration of the Lands Ordinance and of Crown lands in the Northern Territory. In the Federal Capital Territory the administration of the Leases Ordinances is in the hands of the Department of the Interior.

Crown lands are generally classified according to their situation, the suitability of the soil for particular purposes, and the prevailing climatic and other conditions. The modes of tenure under the Acts, therefore, as well as the amount of purchase money or rent, and the conditions as to improvements and residence, vary considerably. The administration of special Acts relating to Crown lands is in some cases in the hands of a Board under the general supervision of the Minister.

In each of the States and in the Northern Territory there is also a Mines Department which is empowered under the several Acts relating to mining to grant leases and licences of Crown lands for mining and allied purposes.

6. **Classification of Tenures.**—The tabular statement which follows shows the several tenures under which Crown lands may be acquired or occupied in each State. In the Northern Territory, leases (excepting pastoral and "miscellaneous") are granted in perpetuity, pastoral and "miscellaneous" leases being restricted to periods of not more than 42 and 21 years respectively. The Lands Ordinance provides also for the grant in fee-simple of town lands, agricultural lands, garden lands and tropical lands, and for the issue of grazing, occupation and "miscellaneous" licences. The mining leases and holdings are, generally speaking, similar to those of the States. In the Federal Capital Territory leases only are issued.

STATE CROWN LANDS—TENURES.

New South Wales.	Victoria.	Queensland.
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FREE GRANTS AND RESERVATIONS.

Free Grants : Reservations.	Free Grants : Reservations.	Free Grants : Reservations.
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UNCONDITIONAL PURCHASES OF FREEHOLD.

Auction Sales : After-auction Purchases : Special Purchases : Improvement Purchases.	Auction Sales.	..
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CONDITIONAL PURCHASES OF FREEHOLD.

Residential Conditional Purchases : Non-residential Conditional Purchases : Additional Conditional Purchases : Conversions of various Leasehold Tenures into Conditional Purchases : Purchases of Town Leases, Suburban Holdings, Returned Soldiers' Special Holdings, Residential Leases, Week-end Leases.	Residential Selection Purchase Leases : Non-residential Selection Purchase Leases : Licences of Auriferous worked-out Lands : Conditional Purchase Leases of Swamp or Reclaimed Lands : Selection Purchase Leases of Mallee Lands : Murray River Settlements : Special Settlement Areas : Conversions into Selection Purchase Leases.
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STATE CROWN LANDS—TENURES—*continued*.

New South Wales.	Victoria.	Queensland.
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LEASES AND LICENCES UNDER LAND ACTS.

Conditional Leases : Conditional Purchase Leases : Special Conditional Purchase Leases : Homestead Selections : Homestead Farms : Settlement Leases : Special Leases : Annual Leases : Scrub Leases : Snow Leases : Inferior Lands Leases : Crown Leases : Improvement Leases and Leases under Improvement Conditions : Occupation Licences : Leases of Town Lands : Suburban Holdings : Weekend Leases : Residential Leases : Leases in Irrigation Areas : Western Lands Leases : Forest Leases : Forest Permits : Prickly-pear Leases.	Perpetual Leases : Auriferous Lands Licences : Leases of Swamp or Reclaimed Lands : Perpetual Leases of Swamp or Reclaimed Lands : Grazing Licences : Perpetual Leases (Mallee) : Miscellaneous Leases and Licences : Bee Farm Licences : Bee Range Area Licences : Eucalyptus Oil Licences : Forest Leases : Forest Licences : Forest Townships : Land (Residence Areas).	Perpetual Lease Selections : Perpetual Lease Prickly Pear Selections : Perpetual Lease Prickly Pear Development Selections : Pastoral Leases : Preferential Pastoral Leases : Stud Holdings : Prickly Pear Leases : Occupation Licences : Special Leases : Grazing Selections : Development Grazing Selections : Prickly Pear Development Grazing Selections : Auction Perpetual Leases : Pastoral Development Leases : Forest Grazing Leases.
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CLOSER SETTLEMENT.

Sales by Auction and Tender : After-auction Sales and Tenders : Settlement Purchases.	Sales of Land : Conditional Purchase Leases : Conditional Purchase Leases in Mountainous Areas.	Perpetual Lease Selections : Settlement Farm Leases : Perpetual Town, Suburban and Country Leases.
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LEASES AND LICENCES UNDER MINING ACTS.

Holdings under Miners' Rights : Gold Mining Leases : Mineral Leases : Coal and Oil Mining Leases : Business Licences : Residence Areas.	Holdings under Miners' Rights : Gold Mining Leases : Mineral Leases : Business Areas : Residence Areas.	Holdings under Miners' Rights : Permits to Prospect for Petroleum : Petroleum Leases : Licences to Prospect for Coal and Mineral Oil : Gold Mining Leases : Mineral Leases : Coal Mining Leases : Business Areas : Residence Areas : Miners' Homestead Leases and Miners' Homestead Perpetual Leases.
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SETTLEMENT OF DISCHARGED SOLDIERS AND SAILORS.

Soldiers' Group Purchases : Returned Soldiers' Special Holding Leases : Returned Soldiers' Special Holding Purchases : also Purchases and Leases under Crown Lands Act of lands set apart for application by discharged soldiers exclusively.	(Same Tenures as under the Land and Closer Settlement Acts.)	Perpetual Lease Selections : Perpetual Town and Suburban Leases.
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STATE CROWN LANDS—TENURES—*continued.*

South Australia.

Western Australia.

Tasmania.

FREE GRANTS AND RESERVATIONS.

Free Grants : Reservations.

Free Grants : Reservations.

Free Grants : Reservations.

UNCONDITIONAL PURCHASES OF FREEHOLD.

Auction Sales : By Private
Contract (Land passed at
Auction).

Auction Sales.

Auction Sales : After-auction
Sales : Sales of Land in Mining
Towns.

CONDITIONAL PURCHASES OF FREEHOLD.

Agreements to Purchase : Special
Agreements to Purchase
(40 years' term) : Homestead
Blocks.Conditional Purchases with Resi-
dence : Conditional Purchases
without Residence : Conditional
Purchases by Direct Payment :
Conditional Purchases of Land
for Vineyards, etc. : Con-
ditional Purchases by Pastoral
Lessees : Conditional Pur-
chases of Grazing Lands :
Homestead Farms : Working-
men's Blocks : Special Settle-
ment Leases.Selections for Purchase : Addi-
tional Selections for Purchase :
Homestead Areas : Selections
in Mining Areas : Sales by
Auction : Sales by Private
Contract : After-auction Sales :
Special Settlement Areas.

LEASES AND LICENCES UNDER LAND ACTS.

Perpetual Leases : Special Per-
petual Leases (Free Period) :
Perpetual Leases of Homestead
Blocks : Miscellaneous Leases :
Licences : Pastoral Leases :
Irrigation Blocks : Town
Allotments in Irrigation Areas :
Forest Leases.Pastoral Leases : Special Leases :
Leases of Town and Suburban
Lands : Cropping Leases.Grazing Leases : Pastoral Leases :
Leases of Land covered with
Button Grass, etc. : Leases of
Mountainous Land : Miscel-
laneous Leases : Temporary
Licences : Occupation Licen-
ces : Residence Licences :
Business Licences : Forest
Leases, Licences and Permits.

CLOSER SETTLEMENT.

Sales by Auction : Agreements
to Purchase : Perpetual
Leases : Miscellaneous Leases.Conditional Purchases : Town
and Suburban Areas.Leases with Right of Purchase :
Special Sales.

LEASES AND LICENCES UNDER MINING ACTS.

Holdings under Miners' Rights :
Search Licences : Occupation
Licences : Gold Leases :
Mineral Leases : Business
Areas : Residence Areas :
Miscellaneous Leases (Salt
and Gypsum).Holdings under Miners' Rights :
Gold Mining Leases : Mineral
Leases : Business Areas :
Residence Areas : Miners'
Homestead Leases.Holdings under Miners' Rights :
Prospectors' Licences : Gold
Mining Leases : Mineral
Leases.

SETTLEMENT OF DISCHARGED SOLDIERS AND SAILORS.

Perpetual Leases : Pastoral
Leases : Agreements to Pur-
chase : Miscellaneous Leases.

Ordinary Tenure : Special Tenure.

Free Grants : Ordinary Tenure :
Special Tenure.

AGRICULTURAL GRADUATES SETTLEMENT.

Agreements to Purchase.

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§ 2. Free Grants and Reservations.

1. **New South Wales.**—(i) *Free Grants.* Crown lands may, by notification in the *Gazette*, be dedicated for public purposes and be granted therefor in fee-simple. Such lands may be placed under the care and management of trustees, not less than three in number, appointed by the Minister.

(ii) *Reservations.* Temporary reservations of Crown lands from sale or lease may be made by the Minister.

(iii) *Areas Granted and Reserved.* During the year 1935-36 the total area for which free grants were prepared was 1,386 acres, including grants of 1,247 acres of land resumed under the 12th clause of the Public Roads Act 1902. During the same period 828 acres were dedicated and permanently reserved, the number of separate dedications being 66.

On the 30th June, 1936, the total area reserved, including temporary reserves, was 16,529,296 acres, of which 5,331,289 acres were for travelling stock, 3,420,506 acres pending classification and survey, 2,115,804 acres for forest reserves, 894,955 acres for water and camping, 1,250,532 acres for mining, and the remainder for temporary commons, railways, recreation reserves and parks, reserves for aborigines, and miscellaneous purposes. A large proportion of the total area reserved is occupied under annual, special, scrub or forestry leases or on occupation licences or permissive occupancy, and is included under the appropriate leasehold tenures described in the following sections.

2. **Victoria.**—(i) *Free Grants.* The Governor may grant, convey or otherwise dispose of Crown lands for public purposes.

(ii) *Reservations.* The Governor may temporarily or permanently reserve from sale, lease or licence any Crown lands required for public purposes, and may except any area of Crown lands from occupation for mining purposes under any miner's right.

(iii) *Areas Granted and Reserved.* During the year 1935, 13 acres were granted without purchase, and reservations of both a permanent and temporary nature, comprising a net area of 68,609 acres, were made. At the end of 1935, the total area reserved was 8,109,488 acres, consisting of roads, 1,794,218 acres; water reserves, 309,658 acres; agricultural colleges, etc., 88,650 acres; permanent forests and timber reserves under Forests Acts, 4,048,698 acres and 732,222 acres respectively; forests and timber reserves under Land Acts, 330,283 acres; reserves in the Mallee, 410,000 acres; and other reserves, 395,759 acres.

3. **Queensland.**—(i) *Free Grants.* The Governor may grant in trust any Crown land which is or may be required for public purposes. Under the Irrigation Act, land to be used for the purpose of any undertaking under that Act may be vested in fee-simple in the Irrigation Commission.

(ii) *Reservations.* The Governor may reserve from sale or lease, either temporarily or permanently, any Crown land which is or may be required for public purposes. Reserved lands may be placed under the control of trustees who are empowered to lease the same for not more than 21 years with the approval of the Minister.

Under the State Forests and National Parks Act, the Governor may permanently reserve any Crown lands and declare them to be a State Forest or a National Park.

(iii) *Areas Granted and Reserved.* During the year 1935 the area granted in fee-simple without payment was 794 acres, the area set apart as reserves 629,095 acres, and reserves cancelled 518,765 acres. The total area reserved including roads at the end of 1935 was 21,299,826 acres, made up as follows:—timber reserves, 3,335,931 acres; State forests and national parks, 2,803,839 acres; for use of aborigines, 6,095,257 acres; streets, surveyed roads and surveyed stock routes, 3,006,402 acres; and general, 5,068,397 acres.

4. **South Australia.**—(i) *Free Grants.* The Governor may dedicate Crown lands for any public purpose and grant the fee-simple of such lands, with the exception of foreshores and land for quays, wharves or landing-places, which are inalienable in fee-simple from the Crown.

(ii) *Reservations.* The Governor may reserve Crown lands for the use and benefit of aborigines, military defence, forest reserves, railway stations, park lands or any other purpose that he may think fit.

(iii) *Areas Granted and Reserved.* During the year 1935-36 free grants were issued for a total area of 24 acres. During the same year reserves comprising 7,861 acres were proclaimed. At the 30th June, 1936, the total area of surveyed roads, railways and other reserves was 16,477,323 acres, including 14,016,000 acres in the north-west of the State set apart as an aboriginal reserve in 1921.

5. *Western Australia.*—(i) *Free Grants.* The Governor may dispose of, in such manner as for the public interest may seem best, any lands vested in the Crown for public purposes, and may grant the fee-simple of any reserve to secure the use thereof for the purpose for which such reserve was made.

(ii) *Reservations.* The Governor may reserve any lands vested in the Crown for public purposes. Areas not immediately required may be leased from year to year. Reserves may be placed under the control of a local authority or trustees, with power to lease them for a period not exceeding 21 years, or may be leased for 99 years. Temporary reserves may also be proclaimed.

(iii) *Areas Granted or Reserved.* During the year ended 30th June, 1936, a few small areas of land were granted in fee-simple, and approximately 1,005,000 acres were reserved for various purposes. At the 30th June, 1936, the total area reserved was 42,068,293 acres, comprising State forests, 3,138,602 acres, timber reserves, 1,764,605 acres, and other reserves, 37,165,026 acres.

6. *Tasmania.*—(i) *Free Grants.* No mention is made in the Crown Lands Act respecting free grants of land, and it is expressly stated that no lands may be disposed of as sites for religious purposes except by way of sale under the Act. Under the Returned Soldiers' Settlement Act of 1916, returned soldiers who applied prior to 31st March, 1922, were eligible to receive free grants of Crown land not exceeding £100 each in value, but these grants were conditional on the land being adequately improved.

(ii) *Reservations.* The Governor in Council may except from sale or lease, and reserve to His Majesty any Crown land for public purposes, and vest for such term as he thinks fit any land so reserved in any person or corporate body. Any breach or non-fulfilment of the conditions upon which such land is reserved renders it liable to forfeiture. A school allotment, not exceeding 5 acres in area, may also be reserved.

(iii) *Areas Granted or Reserved.* During the year ended 31st December, 1935, the area granted free was 759 acres, all of which was granted to soldiers under the Returned Soldiers' Settlement Act, while during the same year, free leases were issued to 1 local body for recreation purposes, and 45 acres were reserved. The total area reserved at the end of 1935 was 1,848,900 acres, exclusive of 18,100 acres of land occupied by Commonwealth and State Departments.

7. *Northern Territory of Australia.*—(i) *Reservations.* The Governor-General may resume for public purposes any Crown lands not subject to any right of or contract for purchase, and may reserve, for the purpose for which they are resumed, the whole or any portion of the land so resumed.

(ii) *Areas Reserved.* The total area of reserves at the 30th June, 1936, was 70,206 square miles, comprising aboriginal native, 67,244 square miles; mission station, 1,225 square miles; and other reserves, 1,737 square miles.

§ 3. Unconditional Purchases of Freehold.

1. *New South Wales.*—(i) *Auction Purchases.* Crown lands, not exceeding in the aggregate 200,000 acres in any one year, may be sold by public auction in areas not exceeding half-an-acre for town lands, 20 acres for suburban lands, and 640 acres for country lands, at the minimum upset price of £8, £2 10s., and 15s. per acre respectively.

At least 10 per cent. of the purchase-money must be paid at the time of sale, and the balance within three months, or the Minister may allow the payment of such balance to be deferred for a period not exceeding 10 years, 4 per cent. interest being charged. Town blocks in irrigation areas may also be sold by auction.

(ii) *After-auction Purchases.* In certain cases, land offered at auction and not sold may be purchased at the upset price. A deposit in accordance with the terms and conditions under which the land was previously offered must be lodged, and if the application be approved by the Minister, the balance of purchase money is payable as required by the specified terms and conditions.

(iii) *Special Purchases.* Under certain circumstances, land may be sold in fee-simple, the purchaser paying the cost of survey and of reports thereon, in addition to the purchase-money. The minimum upset price per acre is the same as in the case of land sold by auction. Areas not exceeding 5 acres in extent may be sold to recognized religious bodies and public authorities at prices determined by the local land board.

(iv) *Improvement Purchases.* The owner of improvements in land in authorized occupation by residence under any Mining or Western Lands Act of land within a gold-field or mineral field may purchase such land without competition at a price determined by the local Land Board, but at not less than £8 per acre for town lands or £2 10s. per acre for other lands. The area must not exceed $\frac{1}{4}$ acre within a town or village, or 2 acres elsewhere, and no person may purchase more than one such area within 3 miles of a similar prior purchase by him.

(v) *Areas Sold.* During the year ended 30th June, 1936, the total area sold was 3,830 acres, of which 483 acres were sold by auction and 126 acres as after-auction purchases, while 336 acres were sold as improvement purchases and 2,885 acres as special purchases including unnecessary alienated roads, 2,819 acres. The amount realized for the sale of the whole area was £59,241.

2. *Victoria.*—(i) *General.* Lands specially classed for sale by auction may be sold by auction in fee-simple, not exceeding 100,000 acres in any one year, at an upset price not less than £1 per acre. The purchaser must pay the survey fee at the time of the sale, together with a deposit of $12\frac{1}{2}$ per cent. of the whole price; the residue is payable in equal half-yearly instalments with interest. Any unsold land in a city, town or borough, areas specially classed for sale, isolated pieces of land not exceeding 50 acres in area, and sites for churches or charitable purposes, if not more than 3 acres in extent, may be sold by auction on the same terms. Swamp or reclaimed lands may also be sold by auction, subject to the condition that the owner keeps open all drains, etc., thereon.

(ii) *Areas sold at Auction and by Special Sales.* During the year 1935, a total of 1,170 acres was disposed of under this tenure, 702 acres being country lands, while 474 acres of town and suburban lands were sold by auction.

3. *Queensland.*—(i) *General.* From 1917 to 1929 the law precluded land being made available for any class of selection which gave the selector the right to acquire the freehold title. Amending legislation giving power to make land available under freehold tenures was passed in 1929 but this provision was repealed by the Act of 1932.

(ii) *Areas Sold, etc.* During the year 1935, 7 unconditional selections comprising 1,678 acres were made freehold.

4. *South Australia.*—(i) *Sales by Auction.* The following lands may be sold by auction for cash:—(a) special blocks; (b) Crown lands which have been offered for lease and not taken up within 2 years; (c) town lands; and (d) suburban lands, which the Governor excepts from the operations of the Land Board. A purchaser must pay 20 per cent. of the purchase money in cash, and the balance within one month or within such

extended time as the Commissioner of Crown Lands may allow. Town lands may be sold subject to the condition that they cannot be transferred or mortgaged within 6 years without the consent of the Commissioner.

(ii) *Areas Sold, etc.* During the year ended 30th June, 1936, the area of town lands and special blocks sold by auction was 71 acres. In addition, 18,566 acres were sold at fixed prices, and the purchases of 56,951 acres on credit were completed, making a total of 75,588 acres.

5. *Western Australia.*—(i) *Sales by Auction.* Town, suburban and village lands must be sold by auction after being surveyed into lots and notified in the *Gazette*. Ten per cent. of the purchase money must be paid in cash, together with the value of any improvements, and the balance in four equal quarterly instalments. Suburban land must be fenced within 2 years, and no Crown grant may be issued until the land is fenced.

(ii) *Areas Sold.* During the year ended 30th June, 1936, the area of town and suburban allotments sold by auction was 637 acres in 415 allotments.

6. *Tasmania.*—(i) *Sales by Auction.* Town lands may be sold by auction for cash or on credit. No town land, the price of which is less than £15, may be sold on credit.

(ii) *After-auction Sales.* Town lands, not within 5 miles of any city, which, after having been offered at auction, have not been sold, may be sold at the upset prices by private contract.

(iii) *Sales of Land in Mining Towns.* Any person being the holder of a residence licence or business licence who shall be in lawful occupation of any residence area or business area, and who shall be the owner of buildings and permanent improvements upon such land of a value equal to or greater than the upset price of such area, shall be entitled to purchase such area at the upset price at any time prior to the day on which such area is to be offered for sale as advertised. The upset price for such area shall not be less than £10, exclusive of the value of improvements, cost of survey, and of grant deed. The area which may be so purchased may, with the consent of the Commissioner, exceed one-quarter of an acre, but shall not in any case exceed one-half of an acre.

(iv) *Areas Sold.* During the year 1935 allotments comprising 2 acres were sold in mining towns, the amount realized being £109.

§ 4. Conditional Purchases of Freehold.

1. *General.*—The various methods of obtaining Crown lands by conditional purchase in the several States are given in some detail in preceding issues of the Official Year Book (see No. 22, pp. 141-9).

2. *New South Wales.*—At the 30th June, 1936, the total number of conditional purchases in existence was 57,475, covering an area of 18,815,531 acres. The following table gives particulars of conditional purchases, including non-residential conditional purchases and special area conditional purchases, for the year ended 30th June, 1936, together with the total area for which deeds had been issued:—

CONDITIONAL PURCHASES, NEW SOUTH WALES.

Year ended 30th June—	Applications Received. (a)		Applications Confirmed.(a)		Areas for which Deeds have been Issued.	
	Number.	Area.	Number.	Area.	During the Year.	To end of Year.
1936	109	Acres. 20,802	115	Acres. 7,962	Acres. 491,916	Acres. 26,149,990

(a) Exclusive of 460 conversions from other tenures comprising 102,444 acres.

3. **Victoria.**—Exclusive of selection in the Mallee country, the total area purchased conditionally in 1935 was 29,335 acres, comprising 29,099 acres with residence and 236 acres without residence. The number of selectors was 183. The total area of Mallee country purchased conditionally in the same year was 7,823 acres, all with residence, the number of selectors being 25.

In addition the final payments were made during the year on conditional purchases comprising 77,382 acres in country other than Mallee and 206,504 acres of Mallee lands.

4. **Queensland.**—(i) *General.* From 1917 until the passing of The Lands Acts Amendment Act of 1929 the law prohibited land being made available for selection with the right to acquire the freehold title. The 1929 measure, however, amended the law in this respect but a further amendment which took effect on the 1st December, 1932, precludes land being made available under any freehold tenure.

(ii) *Lands Acquired.* During the year 1935 the only new selections acquired were agricultural farms to the number of 3 comprising an area of 902 acres. The following selections were made freehold during the year :—Agricultural farms 111,980 acres and prickly-pea selections 41,453 acres.

5. **South Australia.**—The land allotted under agreements to purchase during the year 1935-36 was 49,831 acres, comprising Eyre's Peninsula Railway lands 4,822 acres, Murray Railway lands 807 acres, Pinnaroo Railway lands 1,145 acres, Buckleboo Railway lands 477 acres, closer settlement lands 9,636 acres, soldiers' acquired lands 14,080 acres, surplus lands 6,988 acres, soldiers' ordinary lands 2,309 acres, and other Crown lands 8,874 acres.

6. **Western Australia.**—During the year ended the 30th June, 1936, the number of holdings conditionally alienated was 422, the total area involved being 278,585 acres, comprising conditional purchases by deferred payments with residence and without residence of 268,914 and 7 acres respectively, and free homestead farms 9,664 acres. Under the heading "Deferred payments (with residence)" are included conditional purchases of grazing lands.

In addition, Crown grants were issued during the year for the following selections, the prescribed conditions having been complied with :—Free homestead farms 14,583 acres and conditional purchases 354,300 acres.

7. **Tasmania.**—During the year 1935, conditional purchases of 22,923 acres were completed. The total area sold conditionally was 18,776 acres, comprising selections for purchase 18,283 acres, auction sales 118 acres, and town and suburban allotments 375 acres. The numbers of applications received and confirmed during the year were 462 and 175 respectively.

§ 5. Leases and Licences under Land Acts.

1. **General.**—Information regarding the methods of obtaining leases and licences of Crown lands in the several States and Territories is given in preceding issues of the Official Year Book (*see* No. 22, pp. 149-163).

2. **New South Wales.**—On the 30th June, 1936, the area of leases and licences under the control of the Department of Lands, the Water Conservation and Irrigation Commission, and the Western Lands Commission, comprised 110,968,464 acres of Crown lands, compared with 110,320,619 acres at the close of the previous year.

AREAS TAKEN UP AND OCCUPIED UNDER LEASE OR LICENCE.—NEW
SOUTH WALES, 1935-36. (a)

Particulars.	Area taken up during the year.	Area occupied at end of the year.
<i>Areas taken up under Crown Lands Act.</i>	Acres.	Acres.
Outgoing pastoral leases .. .. .	..	4,083
Occupation licences—ordinary .. .. .	..	983,451
preferential .. .. .	..	370,468
Conditional leases	21,052	12,065,120
Conditional purchase leases .. .. .	..	168,437
Settlement leases .. .. .	..	2,828,044
Improvement leases	6,400	241,912
Annual leases	20,185	614,786
Scrub leases .. .. .	..	125,852
Snow leases	7,260	405,977
Special leases	128,671	895,001
Inferior land leases .. .. .	..	39,000
Residential leases (on gold and mineral fields)	207	7,201
Church and school lands .. .. .	..	11
Permissive occupancies	177,821	1,223,944
Prickly-pear leases	40,973	155,215
Crown leases	165,311	6,810,192
Homestead farms	32,372	4,318,633
Homestead selections and grants	3,213	1,602,997
Suburban holdings	1,043	51,114
Week-end leases	16	198
Leases of town lands .. .. .	..	66
Returned soldiers' special holdings .. .. .	..	15,468
Irrigation areas	29,014	323,579
<i>Areas taken up under Western Lands Act.</i>		
Leases	2,626,894	77,447,548
Permissive occupancies	105,431	270,167
Total	3,365,863	110,968,464

(a) Exclusive of mining leases and forest leases and occupation permits.

3. **Victoria.**—During 1935 Crown lands taken up under leases and licences comprised 213 acres of auriferous lands (licences), together with numerous grazing licences of a temporary nature. The area of Crown lands occupied under leases and licences in 1935 was 5,759,219 acres (a decrease of 43,792 acres compared with the previous year), comprising grazing licences (exclusive of Mallee) 3,525,074 acres, Mallee lands 2,119,428 acres, auriferous lands (licences) 27,148 acres, swamp lands (leases) 2,053 acres, perpetual leases (other than Mallee) 4,977 acres, and perpetual leases (Mallee) under Land Act 1928, 80,539 acres.

4. **Queensland.**—The total area taken up under lease or licence during the year 1935, including land in the Dawson Valley Irrigation Area, was 12,250,751 acres, made up as follows:—Pastoral leases 8,584,840 acres; occupation licences 1,927,904 acres; grazing farms (all classes), 923,033 acres; grazing homesteads (all classes), 358,840 acres; perpetual lease selections 90,083 acres; perpetual lease prickly pear selections 19,875 acres; agricultural farms 902 acres; perpetual lease prickly-pear development selections 267,678 acres; auction perpetual leases—town 131 acres, suburban 18 acres, and country 507 acres; special leases 25,179 acres; leases of reserves 28,938 acres; and forest grazing leases 20,720 acres.

The gross area held at the end of the year 1935 under pastoral tenure was 381,833½ square miles.

The total areas occupied under lease or licence will be found in a table at the end of this chapter.

5. **South Australia.**—The total area leased during 1935-36 under the different forms of lease tenure was 3,125,134 acres, made up as follows:—Perpetual leases—irrigation and reclaimed lands 968 acres, village settlement lands 14 acres, and other Crown lands 59,801 acres; pastoral leases 2,728,960 acres; and miscellaneous leases—grazing and cultivation 335,391 acres.

The total areas held under lease are given in the table at the end of this chapter.

6. **Western Australia.**—The number of leases issued by the Lands Department during the year ended 30th June, 1936, was 1,205 and the total area of leases issued 4,672,261 acres, comprising pastoral leases 4,358,674 acres, special leases (including leases under Section 116 of Land Act 1933 for grazing purposes) 160,955 acres, leases of reserves 152,724 acres, and residential leases 808 acres.

The total areas leased are given in the table at the end of this chapter.

7. **Tasmania.**—The area of pastoral leases issued during the year 1935 was 155,333 acres.

The total areas leased are given in the table at the end of this chapter.

8. **Northern Territory.**—The total area held under lease, licence and permit at the 30th June, 1936, was 211,838 square miles, comprising pastoral leases 184,045 square miles, pastoral permits 1,429 square miles, grazing licences 25,846 square miles, agricultural leases 121 square miles, and miscellaneous leases, including water leases, 398 square miles.

9. **Federal Capital Territory.**—The number of leases granted under the City Area Leases Ordinances 1936 to the 30th June, 1936 (excluding leases surrendered and determined), was 331, representing a capital value of £181,702.

Fourteen leases have been granted under the Church Lands and Special Purposes Ordinances for church and scholastic purposes. In addition a lease in perpetuity has been granted under the Church of England Land Ordinance for church purposes.

§ 6. Leases and Licences under Mining Acts.

1. **General.**—Information regarding the various forms of leases and licences under Mining Acts in the several States and the Northern Territory is given in preceding issues of the Official Year Book (*see* No. 22, pp. 170-7).

2. **New South Wales.**—The following table gives particulars of operations on Crown lands for the year 1935-36:—

AREAS TAKEN UP UNDER MINING ACTS.—NEW SOUTH WALES, 1935-36.

Purposes for which Issued or Occupied.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining	5,897	12,483
Mining for other minerals	2,415	165,833
Authorities to prospect	4,983	64,010
Other purposes	285	6,996
Total	13,580	249,322

The area of land held under lease only at the 30th June, 1936, was 178,838 acres.

3. **Victoria.**—During the year 1935, 771 leases, licences, etc. (including 459 for gold-mining) were issued covering an area of 71,368 acres, the rent, fees, etc., for which amounted to £5,570. The area occupied at the end of the year was 155,578 acres, comprising 130,386 acres for gold, 11,457 acres for oil, 10,397 acres for coal and 3,338 acres for miscellaneous purposes.

4. **Queensland.**—During the year 1935, the number of miners' rights issued was 7,012, and of business licences 7. The following table gives particulars regarding the areas of lands taken up under lease or licence and the total areas occupied for the year 1935. In addition, an area estimated at 25,000 acres was at the end of 1935 held under miners' rights and dredging claims.

AREAS TAKEN UP UNDER MINING ACTS.—QUEENSLAND, 1935.

Particulars.					Areas Taken up during Year.	Total Areas Occupied at End of Year.
					Acres.	Acres.
Gold-mining .. .. .	..	..	..	..	2,505	9,319
Mining for other minerals .. .. .	..	..	..	..	470	24,536
Miners' homestead leases .. .. .	..	..	..	..	3,424	343,432
Petroleum-prospecting permits .. .. .	..	..	..	..	11,000	80,840
Total .. .. .	..	..	..	..	17,399	458,127

5. **South Australia.**—The following table gives particulars of operations for the year 1935-36:—

AREAS TAKEN UP UNDER MINING ACTS.—SOUTH AUSTRALIA, 1935-36.

Particulars.					Areas Taken up during Year.	Total Areas Occupied at End of Year.
					Acres.	Acres.
Gold-mining leases .. .. .	..	..	..	..	200	2,728
Mineral and miscellaneous .. .. .	..	..	..	..	4,761	53,955
Claims .. .. .	..	..	..	..	4,117	8,666
Search licences and permits .. .. .	..	..	..	..	46,720	67,840
Occupation licences .. .. .	..	..	..	..	1	49
Total .. .. .	..	..	..	..	55,799	133,238

6. **Western Australia.**—The following table gives particulars of operations for the year 1935, the figures being exclusive of holdings under miners' rights and mineral oil licences. Of the areas shown as taken up in 1935, the area under lease was 24,053 acres for gold-mining, 55 for mining for other minerals, 682 for miners' homesteads, and 273 for miscellaneous—a total of 25,063 acres. The balance was taken up under licences.

AREAS TAKEN UP UNDER MINING ACTS.—WESTERN AUSTRALIA, 1935.

Particulars.					Areas Taken up during Year.	Total Areas Occupied at End of Year.
					Acres.	Acres.
Gold-mining .. .. .	..	..	..	..	109,054	91,178
Mining for other minerals .. .. .	..	..	..	..	4,810	49,851
Other purposes .. .. .	..	..	..	..	1,522	37,786
Total .. .. .	..	..	..	..	115,386	178,815

7. **Tasmania.**—During the year 1935, the number of leases issued was 237, of which 34 were for gold-mining, covering 668 acres; and 114 for tin, covering 2,580 acres. The following table gives particulars for the year 1935 :—

AREAS TAKEN UP UNDER MINING ACTS.—TASMANIA, 1935.

Particulars.						Areas Taken up during Year.	Total Areas Occupied at End of Year.
						Acres.	Acres.
Gold-mining	..	..	..	..	..	1,636	3,190
Mining for other minerals	..	..	..	..	..	4,099	26,437
Licences to search for coal or oil	..	..	..	..	..	1,000	4,200
Other purposes	..	..	..	..	..	95	2,722
Total	..	..	..	..	..	6,830	36,549

8. **Northern Territory.**—At the 30th June, 1936, there existed 23 mineral leases comprising 396 acres, and 18 gold-mining leases, comprising 720 acres. There were also 492 protected gold-mining lease applications for 16,452 acres, 129 protected mineral lease applications for 6,005 acres, 9 gold reef claims for 45 acres, 25 mineral reef claims for 255 acres, and 6 reward areas for 260 acres. In addition, 23 exclusive prospecting licences covering 7½ square miles, and 2 mineral oil and coal licences covering 1,900 square miles were issued.

9. **Summary.**—The following table shows the areas under leases and licences for mining purposes and the total areas occupied for the years 1923, 1928 and 1933 to 1935 :—

CROWN LANDS, LEASES AND LICENCES FOR MINING PURPOSES.

Year.	N.S.W. (a)	Victoria.	Q'land.(b)	S. Aust.(b)	W. Aust.(c)	Tas. (b)	Total.(d)
AREAS FOR WHICH LEASES AND LICENCES ISSUED DURING YEAR.							
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1923 ..	28,492	9,207	67,754	610,377	37,567	47,535	800,932
1928 ..	(f) 944,119	8,302	1,793,028e	196,521	47,975	23,910	3,013,855
1933 ..	40,093	33,960	111,117	72,897	60,800	4,811	329,678
1934 ..	11,004	57,483	117,659	36,100	102,045	8,148	332,439
1935 ..	13,580	71,368	17,399	(a) 55,799	115,386	6,830	280,362

TOTAL AREAS OCCUPIED AT END OF YEAR.

1923 ..	299,688	47,361	444,586	653,899	127,829	77,627	1,650,990
1928 ..	310,497	39,904	2,810,262	242,688	132,536	54,362	3,590,249
1933 ..	254,918	113,870	520,346	99,545	122,780	31,397	1,142,856
1934 ..	246,033	127,732	593,657	91,680	168,384	36,647	1,264,133
1935 ..	249,322	155,578	458,127	(a) 133,238	178,815	36,549	1,211,629

(a) Year ended 30th June following. (b) Exclusive of lands held under miners' rights only.
 (c) Exclusive of holdings under miners' rights and mineral oil licences. (d) Exclusive of Northern Territory. (e) Mainly Petroleum-prospecting permits. (f) Includes one area of 900,000 acres.

§ 7. Closer Settlement.

1. **General.**—Particulars regarding the methods of acquisition and disposal of land for closer settlement in the several States are given in preceding Year Books (see No. 22, pp. 163-9).

2. **New South Wales.**—Since the inception of closer settlement in 1905, 1,845 estates totalling 4,028,694 acres have been purchased by the Crown for purposes of closer settlement of civilians and returned soldiers. The total area set apart and the number of farms made available to 30th June, 1936, are as follows :—

CLOSER SETTLEMENT AREAS (a).—NEW SOUTH WALES.

To 30th June—	Areas.			Values.		
	Acquired Lands.	Adjoining Crown Lands.	Total.	Cost of Acquired Lands.	Value of Adjoining Crown Lands.	Total.
	Acres.	Acres.	Acres.	£	£	£
1936.. ..	4,028,694	207,638	4,236,332	14,568,595	359,045	14,927,640

(a) Includes 70 long-term leases resumed for closer settlement, but excludes areas acquired for village sites, 3,665 acres.

The following table gives particulars regarding the disposal of the farms by closer settlement purchase at the 30th June, 1936 :—

CLOSER SETTLEMENT ALLOTMENTS.—NEW SOUTH WALES.

At 30th June—	Farms Allotted to Date.			Total Amount received in respect of Closer Settlement Farms.
	Number.	Area.	Capital Value.	
	No.	Acres.	£	£
1936	9,210	4,246,213	14,258,470	9,827,042

3. **Victoria.**—The following statement shows the operations under the provisions of the Closer Settlement Acts to the 30th June, 1936 :—

CLOSER SETTLEMENT.—VICTORIA.

(INCLUDING IRRIGATED AREAS.)

To 30th June—	How Made Available for Settlement.									
	Total Area Acquired.	Total Cost of Purchases. (b)	Farm Allotments.	Workmen's Homes Allotments.	Agricultural Labourers' Allotments.	Town Allotments. (a)	Roads and Reserves.	Number of Farms, etc.	Total Receipts (Land and Advances).	Repayments of Principal (Land and Advances).
	Acres.	£	Acres.	Acres.	Acres.	Acres.	Acres.	No.	£	£
1936	1,394,237	9,882,270	1,186,555	796	3,494	65,533	6,855	8,670	12,511,368	4,362,085
										Acres.
										27,175

(a) Includes all land sold other than under Conditional Purchase Lease. (b) Includes value of Crown Lands taken over.

In the above table the area and cost of land acquired for closer settlement purposes include, in addition to 102,056 acres purchased for £1,001,608 and transferred subsequently to discharged soldiers, a total area of 461,286 acres costing £3,756,206 which was purchased originally for the settlement of discharged soldiers.

4. **Queensland.**—Separate records relating to closer settlement are no longer kept by the Land Administration Board, and the operations under this heading are now included with "Leases and Licences under Land Acts." The total area acquired to

31st December, 1934, was 970,778 acres, costing £2,292,881. At the same date the area allotted amounted to 915,690 acres distributed over 3,048 selections, consisting of 2,155 agricultural farms, 257 unconditional selections, 544 perpetual lease selections, 9 prickly-pear selections, 6 perpetual lease prickly-pear selections and 77 settlement farm leases. An area of 13,038 acres was sold by auction.

5. **South Australia.**—The following table shows the area of land acquired for the purposes of closer settlement, and the manner in which it had been dealt with to the 30th June, 1936 :—

CLOSER SETTLEMENT.—SOUTH AUSTRALIA.

To 30th June—	Area of Lands Re- purchased (exclusive of land after- wards set apart for other purposes).	Agree- ments, with Covenants to Purchase.	Total Area Leased as Homestead Blocks.		Perpetual Leases.	Mis- cellaneous Leases.	Sold.	Remainder Un- occupied (including Roads).
			Right of Purchase.	Perpetual Lease.				
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1936 ..	761,005	471,548	280	1,266	34,062	13,864	229,548	10,437

The total area repurchased at 30th June, 1936, was 855,912 acres at a cost of £2,819,281. Included in these figures are 64,766 acres purchased for £282,762 and afterwards set apart for discharged soldiers, 3,214 acres reserved for forest and waterworks purposes, the purchase money being £16,185, and also 26,027 acres of swamp and other lands which were purchased for £111,851 in connexion with reclamation of swamp lands on the River Murray. Of the total area, 750,568 acres have been allotted to 2,736 persons, the average area to each being 274 acres.

6. **Western Australia.**—The total area acquired for closer settlement up to the 30th June, 1936, was 905,713 acres, costing £1,180,443. Of this area, 23,535 acres have been set aside for roads, reserves, etc., leaving a balance of 882,178 acres available for selection. Particulars of operations under the Act for the year ending 30th June, 1936, are as follows :—Area selected during the year 3,522 acres; number of farms, etc., allotted to date 1,469; total area occupied to date 747,725 acres; balance available for selection 134,453 acres; and total revenue £863,328.

7. **Tasmania.**—Up to the 30th June, 1936, 37 areas had been opened up for closer settlement. The total purchase money paid by the Government was £367,599 and the total area acquired amounted to 103,363 acres, including 12,053 acres of Crown Lands. The number of farms allotted was 331.

8. **Summary.**—The following table gives particulars of operations under the Closer Settlement Acts at the 30th June, 1936 :—

CLOSER SETTLEMENT.—TOTAL AREAS ACQUIRED AND ALLOTTED AT 30th JUNE, 1936.

Particulars.	N.S.W.	Victoria.	Q'land. (d)	S. Aust.	W. Aust.	Tas.	Total.
Area acquired (a) acres	64,236,332	61,394,237	970,778	761,005	905,713	103,363	8,371,428
Purchase price (b) £	14,568,595	9,820,120	2,292,881	2,408,484	1,180,443	367,599	30,644,122
Farms, etc., { No.	(c) 9,210	(c) 8,670	3,048	2,736	1,469	331	28,469
allotted { acres	64,246,213	61,358,434	915,690	750,568	747,725	103,363	8,121,993

(a) Includes Crown lands. New South Wales, 207,038 acres; Victoria, 113,571 acres; Tasmania, 12,053 acres. (b) Private lands only. (c) Includes 1,710,772 acres in New South Wales and 102,050 acres in Victoria subsequently transferred to soldier settlement, and their subdivisions into allotments. (d) As at 31st December, 1934. (e) Area acquired. Area actually allotted 1901

§ 8. Settlement of Returned Soldiers and Sailors.

1. **General.**—Information in regard to the methods adopted in each State for providing land for the settlement of returned soldiers and sailors, together with the conditions under which such land could be acquired, is given in earlier issues of the Official Year Book (*see* No. 13, pp. 1016-1023, and No. 18, pp. 187-189). Later modifications have been made with a view to simplifying procedure and liberalizing the conditions under which holdings may be acquired.

Particulars respecting the position of soldier settlement in each State at the latest available date are given in the paragraphs immediately following.

2. **New South Wales.**—At the 30th June, 1936, the area set apart for soldiers was 9,755,264 acres, of which 1,710,272 acres comprised acquired land purchased at a cost of £8,113,956. The number of settlers to whom farms, etc., had been allotted up to the 30th June, 1936, was 9,652. Four thousand seven hundred and twelve soldiers have either transferred or abandoned their farms, leaving 4,940 in occupation of 7,579,240 acres, of which 6,183,552 acres were Crown lands (including 3,837,177 acres in the Western Division taken up under the Western Lands Act), 1,303,568 acres acquired lands, and 92,120 acres within Irrigation Areas. These totals exclude 703 discharged soldiers who purchased privately-owned land with their own capital and were granted advances for the purchase of stock and plant or for effecting improvements.

3. **Victoria.**—At the 30th June, 1936, the area acquired or set apart for soldier settlement was 2,534,764 acres consisting of 1,763,240 acres of private land purchased at a cost of £13,361,241, 102,056 acres costing £1,001,608 taken over from Closer Settlement, and 669,468 acres of Crown lands valued at £548,983. Subsequently 461,286 acres valued at £3,756,206 were transferred to Closer Settlement. Up to the 30th June, 1936, the number of settlers to whom farms, etc., had been allotted was 11,712, and the number of farms, etc., allotted was 9,766 (including 809 farms originally purchased for closer settlement purposes) containing 2,434,564 acres. In addition, 1,035 share-farmers and holders of leasing agreements and private land had received assistance. The number of farms, etc., occupied at the 30th June, 1936, was 9,295 (including 653 originally purchased for closer settlement) containing 2,320,418 acres.

4. **Queensland.**—At the 30th June, 1929, the area acquired or set apart for soldier settlement was 577,633 acres, of which 41,101 acres comprised private land, purchased at a cost of £270,480. The number of farms occupied was 1,148, containing 440,992 acres. Some of these selections were acquired under the ordinary provisions of the Land Act, and do not include areas specially set apart for soldiers.

As special records are not now kept respecting the areas held by discharged soldier settlers later information cannot be given.

5. **South Australia.**—At the 30th June, 1936, the area of land acquired or set apart for soldier settlement was 1,336,612 acres, of which 1,202,653 acres comprised private land purchased at a cost of £3,863,572. These figures are exclusive of mortgages discharged, £494,770 on 360,493 acres representing 300 farms, etc., and 314 settlers. The number of soldiers to whom assistance had been granted under the Discharged Soldiers' Settlement Acts up to the 30th June, 1936, was 4,185, and the area of farms, etc. (including mortgages discharged), on which assistance had been granted was 2,746,744 acres. At the 30th June, 1936, farms, etc., occupied numbered 1,974 containing 1,574,683 acres.

6. **Western Australia.**—At the 30th June, 1936, the area of land acquired or set apart for soldier settlement was 14,287,643 acres, of which 345,110 acres comprised private land purchased at a cost of £605,076. Up to the 30th June, 1936, assistance had been given to 5,213 returned soldiers, and the Agricultural Bank held 3,486 properties as security for advances. The area held, including pastoral leases, was approximately 25,830,000 acres, and advances approved amounted to £6,639,942. The number of farms, etc., occupied by returned soldiers at the 30th June, 1936, was 2,241.

7. *Tasmania*.—At the 30th June, 1936, the area acquired or set apart for soldier settlement was 341,721 acres, of which 272,356 acres comprised private land purchased at a cost of £2,054,255. Up to the 30th June, 1936, the number of settlers to whom farms, etc., had been allotted was 2,380, and the number of farms, etc., allotted was 2,189 containing 341,721 acres. The number of farms, etc., occupied at the 30th June, 1936, was 1,531 containing 311,431 acres.

8. *Summary*.—The following table gives a summary of the area acquired, the purchase price thereof, the number of settlers assisted, and the number and area of farms occupied in all the States to the 30th June, 1936 :—

SOLDIER SETTLEMENT.—AREAS ACQUIRED, SETTLERS ASSISTED AND FARMS OCCUPIED—30th JUNE, 1936.

Particulars.	New South Wales.	Victoria.	Queensland.(c)	Sth. Australia.	Western Australia.	Tasmania.	Total.
Area acquired or set apart—							
(i) Private land acquired acres	41,710,272	61,865,296	41,101	41,202,653	345,110	272,356	5,448,788
(ii) Crown lands set apart acres	8,044,992	669,468	536,532	133,959	13,942,533	69,365	23,330,784
Total land acquired or set apart acres	9,755,264	62,534,764	577,633	41,336,612	14,287,643	341,721	28,833,637
Price paid by Government for private lands £	28,113,956	14,362,849	270,480	43,863,572	605,076	2,054,255	29,270,188
Number of settlers to whom farms, etc., had been allotted up to the 30th June, 1936	9,652	11,712	(g)	4,185	(e)	2,380	(g)
Farms, etc., occupied at the 30th June, 1936	4,940	(b) 9,295	1,148	(f) 1,974	2,241	1,531	21,120
.. .. acres	7,579,240	62,320,418	440,992	41,574,683	(g)	311,431	(g)

(a) Included with closer settlement. (b) Including 461,286 acres costing £3,756,206 subsequently transferred to closer settlement, or its subdivision into farms, etc. (c) At 30th June, 1929; later information not available. (d) Excludes mortgages discharged. £494,770 on 360,403 acres representing 300 farms, etc., and 314 settlers. (e) Number of soldiers to whom assistance had been granted under the Discharged Soldiers' Settlement Acts. (f) Including mortgages discharged. (g) Not available.

9. *Losses on Soldier Settlements*.—(i) *General*. At the Premiers' Conference in Melbourne in 1917, it was agreed that the States should undertake the work of settling on the land returned soldiers and munition and war workers, and that the Commonwealth should raise the necessary loans for the States for this purpose.

The original arrangement provided that the Commonwealth should take the responsibility of finding up to £500 per settler as working capital for improvements, implements, seed, etc., an amount which was subsequently increased to £625, together with £375 per settler for resumptions and works incidental to land settlement approved by the Commonwealth. Loans were to be advanced to the settlers by the States at reasonable rates of interest not exceeding 3½ per cent. in the first year, increasing by ½ per cent. each subsequent year to the full rate of interest at which the money had been raised, plus working expenses, the difference between these rates and the cost of the money to the Government to be borne equally by the Commonwealth Government and the State Government. This provision respecting interest loss was not ultimately carried out as passed, the Commonwealth Government assuming responsibility for more than one-half of the interest loss, viz., a rebate of interest equal to 2½ per cent. per annum during a period of five years from the date of payment to the State of each instalment of loan money.

(ii) *Report by Mr. Justice Pike*. In addition to this expected loss of interest other losses have occurred in connexion with soldier settlement, and in 1927 Mr. Justice Pike, of the Land Valuation Court of New South Wales, was commissioned to report, not only on the losses, but on the principles on which financial responsibility should be divided. His report in 1929, to which reference should be made for fuller information, found that in all the negotiations concerning soldier settlement on the land the States insisted on

undivided control, and that financial responsibility went along with control except so far as the Commonwealth definitely promised to give assistance. The undertaking of the Commonwealth to share equally with the States the cost of lower interest rates to soldier settlers was made the basis of a practical compromise, and the report recommended that the total loss should be shared equally between the two parties.

The gross losses were assessed at £23,525,522 distributed amongst the States as follows:—New South Wales, £7,003,950; Victoria, £7,721,891; Queensland, £1,853,315; South Australia, £3,565,829; Western Australia, £2,059,368; and Tasmania, £1,321,169. Other concessions granted by the Commonwealth Government increased its proportion of the losses to £12,333,000.

§ 9. Tenure of Land by Aliens.

Information regarding the terms and conditions under which land can be held by aliens is contained in earlier issues of the Official Year Book (*see* No. 18, pp. 190–1).

§ 10. Advances to Settlers.

1. *General*.—A detailed statement regarding the terms and conditions governing advances to settlers in the several States and the Northern Territory will be found in preceding issues of the Official Year Book (*see* No. 22, pp. 179–186).

In this section are summarized the loans and advances made by the various Government lending agencies in the States including the transactions in lands acquired under closer and soldier settlement schemes. The balances owing on former Crown lands sold on the conditional purchase, etc., system, however, are not included.

The amounts outstanding do not represent the actual differences between the total advances and settlers' repayments for considerable remissions of indebtedness have been made in all States as a result of reappraisements of land values and the writing down of debts.

2. *New South Wales*.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1936:—

ADVANCES TO SETTLERS.—NEW SOUTH WALES.

Advances.	Advances made during 1935–36.	Total Advances at 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Loans Current.	£
Department of Lands—				
Closer and Soldier Land Settlement	..	14,568,595	7,984	13,372,182
Soldier Settlers	1,158	23,194,424	3,702	1,270,502
Wire Netting	30,846	1,371,546	4,976	494,627
Prickly pear	4,026	106,255	310	20,634
Rural Bank—				
Rural Bank Department	1,559,342	30,221,720	17,544	14,062,067
Government Agency Department—				
Necessitous Farmers	51,383	5,695,937	3,138	1,006,915
Unemployment Relief and Dairy Promotion	101,924	1,175,936	4,727	938,187
Farmers' Relief Agency	491,284	1,292,542	5,742	661,151
Shallow Boring	18,252	715,643	1,228	239,520
Civilian Settlers on Irrigation Areas	26,305	(b)	1,023	(b)
Government Guarantee Agency ..	1,616	..	6	3,286
	2,286,136	58,342,598	50,380	32,069,071

(a) In addition, the sum of £1,885,121 has been expended on developmental works on soldiers' settlements. (b) These figures have lost their identity owing to consolidation of various types of debts.

3. **Victoria.**—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1936 :—

ADVANCES TO SETTLERS.—VICTORIA.

Advances.	Advances made during 1935-36.	Total Advances at 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Persons.	£
	£	£		
Crédit Foncier—				
Civilians	81,025	10,369,664	4,708	4,323,059
Discharged Soldiers	724	836,907	467	464,575
Treasurer—				
Cool Stores, Canneries, etc. ..	..	615,582	(b) 21	327,267
Closer Settlement Commission—				
Closer Settlement Settlers ..	301,472	220,719,416	5,411	211,335,236
Soldier Settlers	481,052	226,988,638	5,446	216,206,762
Cultivators of Land	78,008	1,378,718	1,304	410,846
Wire Netting	20,796	508,853	(c)	282,079
	963,077	61,417,778	17,357	33,349,824

(a) Represents Consolidated Debts of settlers (Section 30, Act 4091).
Co-operative Societies. (c) Not available.

(b) Companies and

4. **Queensland.**—The following table gives particulars of advances to 30th June, 1936. The figures are exclusive of transactions in land :—

ADVANCES TO SETTLERS.—QUEENSLAND.

Act under which Advances were made.	Advances made during 1935-36.	Total Advances at 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Persons.	£
	£	£		
Agricultural Bank Acts	268,011	7,271,794	5,194	1,673,741
Discharged Soldiers' Settlement Act (a)	4,670	2,439,367	1,845	681,095
Water Facilities .. .. .	..	59,139	349	52,297
Wire Netting, Marsupial Proof Fencing, etc.	41,006	913,452	3,479	476,960
Seed Wheat	5,181	(b) 85,147	(c)	11,944
Drought Relief .. .. .	..	67,381	1,414	42,482
Total	318,868	10,836,280	(d) 12,281	2,939,119

(a) Includes advances to group settlements through the Lands Department, as well as advances through the Agricultural Bank. (b) Includes accrued interest. (c) Not available. (d) Incomplete.

5. South Australia.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1936 :—

ADVANCES TO SETTLERS.—SOUTH AUSTRALIA.

Particulars.	Advances made during 1935-36.	Total Advances at 30th June, 1936.	Amount outstanding at 30th June, 1936.		Arrears of Interest at 30th June, 1936.
			Number of Persons.	£	
Department of Lands—	£	£			£
Advances to soldier settlers ..	4,000	5,018,122	1,141	3,303,500	839,596
Advances to blockholders ..	..	41,451	5	40	4
Advances for sheds and tanks ..	..	75,093	327	52,784	20,155
Advances under Closer Settlement Acts ..	30,640	2,388,625	1,350	1,392,902	121,619
Advances under Agricultural Graduates Settlement Act ..	7,577	29,878	18	29,030	1,015
Farmers Assistance Board—					
Advances in drought-affected areas	165	2,044,314	2,997	1,049,227	104,113
Advances under Farmers Relief Acts (a) ..	448,172	2,601,918	1,682	752,834	47,733
Irrigation Branch—					
Advances to civilians ..	1,108	262,261	410	119,324	38,129
Advances to soldier settlers ..	2,211	1,085,467	733	975,859	208,884
State Bank of South Australia (C. F. Department) ..	67,316	4,851,009	2,110	1,069,538	41,979
Advances to settlers for improvements ..	9,396	570,419	1,345	351,233	93,410
Advances under Vermin and Fencing Acts ..	8,479	1,336,376	7,013	473,425	63,528
Advances under Loans to Producers Act ..	3,543	303,899	310	240,992	11,538
Total	643,576	20,909,732	19,541	9,870,688	1,682,893

(a) Previously shown under Advances in drought-affected areas.

6. Western Australia.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1936 :—

ADVANCES TO SETTLERS.—WESTERN AUSTRALIA.

Particulars.	Advances made during year 1935-36.	Total Advances at 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Persons.	£
Development loans ..	£ 53,827	£ 9,463,575	7,859	6,522,211
Soldier settlement loans ..	426	5,991,972	3,390	5,112,019
Advances to rural industries ..	..	31,017	8	42,357
Cropping advances ..	61,668	13,141,908	2,121	1,873,606
Group Settlement advances ..	9,518	2,302,264	1,684	1,283,484
Repurchased Estates—				
Under A.L.P. Act 1909 ..	..	575,386	..	121,229
Soldier Settlement ..	..	605,076	..	183,694
Wire and Wire Netting Advances ..	11,023	444,171	2,581	110,830
Total	136,462	32,555,369	17,643	15,249,430

(a) Amount outstanding reduced as from 1st January, 1936, as a result of revaluation.

7. **Tasmania.**—The following table gives particulars respecting advances under State Authorities to 30th June, 1936. The figures are exclusive of the sums expended and the amounts outstanding in connexion with closer and soldier land settlement. The areas so purchased have been leased on 99 year terms having an option of purchase which the leaseholder may exercise at any time.

ADVANCES TO SETTLERS.—TASMANIA.

Advances.	Advances made during 1935-36.	Total Advances to 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Persons.	£
	£	£		
Agricultural Bank—				
State Advances Act and Rural Credits	33,790	583,662	915	327,251
Orchardists' Relief, 1926 .. .. .	..	46,832	100	4,889
Unemployed (Assistance to Primary Producers) Relief Act, 1930-1931	5,347	99,177	955	69,564
Bush Fire Relief Act, 1934 .. .. .	..	14,855	532	11,145
Flood Sufferers' Relief Act, 1929	134	10,086	420	9,003
Crop Losses, 1934-35 .. .. .	..	35,523	188	14,855
Minister for Agriculture—				
Soldier Settlers	9,053	740,640	1,283	173,861
Closer Settlers	6,154	44,805	187	18,145
Total	54,478	1,575,580	4,580	628,713

8. **Northern Territory.**—During the financial year 1935-36 the amount of £1 was advanced, the total amount advanced to 30th June, 1936, being £22,775 (approximately). The balance outstanding from 49 settlers, at 30th June, 1936, including interest, was £9,480.

9. **Summary of Advances.**—The following table gives a summary for each State and the Northern Territory to the 30th June, 1936. With the exception of Queensland, where the figures are incomplete, and Tasmania, the particulars so far as they are available represent the total sums advanced to settlers including amounts spent by the various Governments in the purchase and improvement of estates disposed of by closer settlement, etc., while the amounts outstanding reveal the present indebtedness of settlers to the Governments, including arrears of principal and interest but excluding amounts written off debts and adjustments for land revaluations:—

ADVANCES TO SETTLERS.—AUSTRALIA.

State.	Advances made during 1935-36.	Total Advances made to 30th June, 1936.	Amount outstanding at 30th June, 1936.	
			Number of Persons.	£
	£	£		
New South Wales	2,286,136	58,342,598	50,380	32,069,071
Victoria	963,077	61,417,778	17,357	33,349,824
Queensland	318,868	10,836,280	12,281	2,939,119
South Australia	043,576	20,900,732	19,541	11,553,581
Western Australia	130,402	32,555,300	17,043	15,249,430
Tasmania	54,478	1,575,580	4,580	628,713
Northern Territory	1	22,775	49	9,480
Total	4,402,598	185,660,112	121,831	95,799,218

§ 11. Alienation and Occupation of Crown Lands.

1. **General.**—The figures given in the previous parts of this chapter show separately the areas alienated, in process of alienation, or occupied under various tenures. The following tables set out in summarized form the position in regard to the tenure of land in each State, in the Northern Territory, and in the Federal Capital Territory during the latest year for which information is available. Particulars for each year from 1925 onward will be found in Commonwealth Production Bulletin, No. 30, page 9. The area unoccupied includes roads, permanent reserves, forests, etc. In some cases, lands which are permanently reserved from alienation are occupied under leases and licences, and have been included therein. Lands occupied under leases or licences for pastoral purposes are frequently held on short tenures only, and could thus be made available for settlement practically whenever required.

2. **New South Wales.**—Of the total area of New South Wales, 23.3 per cent. had been alienated at the 30th June, 1936, 11.2 per cent. was in process of alienation, 57.1 per cent. was held under leases and licences, and the remaining 8.4 per cent. was unoccupied or held by the Crown.

The following table gives particulars for the year ended 30th June, 1936:—

ALIENATION AND OCCUPATION OF CROWN LANDS.—NEW SOUTH WALES, 30th JUNE, 1936.

Particulars.	Acres.	Particulars.	Acres.
1. Alienated.		3. Held under Leases and Licences.	
Granted and sold prior to 1862 ..	7,146,579	Homestead Selections and Grants ..	1,002,097
Sold by auction and other sales, 1862 to date ..	15,061,283	Perpetual Leases ..	20,157,482
Conditionally sold, 1862 to date ..	26,149,990	Long-term Leases ..	76,563,587
Granted under Volunteer Land Regulations, 1867 to date ..	172,195	Short-term Leases and Temporary Tenures ..	6,344,598
Granted for public and religious purposes ..	291,452	Forest Leases and Occupation Permits ..	2,005,724
	48,791,502	Mining Leases and Permits ..	178,838
Less lands resumed or reverted to Crown ..	2,577,049		
Total ..	46,204,453	Total ..	113,153,026
2. In Process of Alienation.		4. Unoccupied (a). Particulars of Lord Howe Island not being available the area, 3,220 acres, is included under unoccupied. (b) (Approximate)	
Conditional purchases ..	18,815,531		16,541,471
Closer settlement purchases ..	2,824,278		
Soldiers' group purchases ..	412,887		
Other forms of sale ..	84,854		
Total ..	22,137,550		

Area of State—198,036,500 acres.

(b) Of this area only 4,103,946 acres are available for selection, the balance being reservations for roads and for various public purposes, water frontages, and river and lake surfaces.

3. **Victoria.**—The total area of the State of Victoria is 56,245,760 acres, of which 47.9 per cent. had been alienated up to the end of the year 1935; 10.8 per cent. was in process of alienation under deferred payments and closer settlement schemes; 10.5 per cent. was occupied under leases and licences; while 30.8 per cent. was unoccupied or held by the Crown.

The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS.—VICTORIA, 31st DECEMBER, 1935.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated</i>	26,948,270	3. <i>Leases and Licences held—</i>	
2. <i>In Process of Alienation—</i>		Under Lands Department—	
Exclusive of Mallee and Closer		Perpetual Leases ..	85,516
Settlement Lands ..	1,480,023	Other Leases and Licences	34,932
Mallee Lands (exclusive of		Temporary (Yearly) Graz-	
Closer Settlement Lands) ..	3,928,355	ing Licences ..	5,644,502
Closer Settlement Lands ..	666,365	Under Mines Department ..	155,578
Village Settlements ..	16	Total	5,920,528
Total	6,074,759	4. <i>Occupied by the Crown or</i>	
		<i>Unoccupied (a)</i>	17,302,203

Total area of State—56,245,760 acres.

(a) These Crown lands comprise reservations for roads and for various public purposes, 8,109,488 acres; water frontages, beds of rivers, lakes, etc., unsold land in cities, towns and boroughs 3,904,815; and other lands (unoccupied) 5,287,900.

4. *Queensland.*—The total area of this State is 429,120,000 acres, of which, on the 31st December, 1935, 4.6 per cent. was alienated; 1.0 per cent. was in process of alienation; and 77.6 per cent. was occupied under leases and licences. The remainder 15.9 per cent. was either unoccupied or held as reserves or for roads.

The distribution is shown in the following table :—

ALIENATION AND OCCUPATION OF CROWN LANDS.—QUEENSLAND, 31st DECEMBER, 1935.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated—</i>		3. <i>Occupied under Leases and</i>	
By Purchase	19,545,134	<i>Licences—</i>	
Without Payment	91,571	Pastoral Leases	232,226,880
Total	19,636,705	Occupation Licences ..	11,345,921
		Grazing Selections and Settle-	
		ment Farm Leases ..	81,197,977
		Leases—Special Purposes ..	1,242,111
		Under Mines Department ..	483,127
		Perpetual Lease Selections,	
		Perpetual Lease Prickly-	
		pear Selections and Irriga-	
		tion Leases	5,598,715
		Auction Perpetual Leases ..	20,976
		Prickly-pear Leases ..	812,080
		Forest Grazing Leases ..	20,720
		Total	332,948,507
2. <i>In Process of Alienation</i> ..	8,354,161	4. <i>Reserves, Surveyed Roads and</i>	
		<i>Surveyed Stock Routes (a)</i> ..	21,299,826
		5. <i>Unoccupied</i>	46,880,801

Total area of State—429,120,000 acres.

(a) Includes reserves of a total area of 18,293,424 acres.

5. *South Australia.*—The area of the State of South Australia is 243,244,800 acres, and at the 30th June, 1936, 5.0 per cent. was alienated; 1.5 per cent. in process of alienation; 50.8 per cent. occupied under leases and licences; and 42.7 per cent. unoccupied or occupied by the Crown.

The subjoined table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS.—SOUTH AUSTRALIA,
30th JUNE, 1936.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated</i> —		3. <i>Held under Lease and Licence</i> —	
Sold	12,018,009	Right of Purchase Leases ..	1,369,046
Granted for Public Purposes ..	233,465	Perpetual Leases, including	
		Irrigation Leases ..	15,736,819
		Pastoral Leases ..	103,962,514
		Other Leases and Licences ..	2,441,999
		Mining Leases and Licences	133,238
	12,251,474		
Total		Total	123,643,616
2. <i>In Process of Alienation</i> ..	3,591,809	4. <i>Area Unoccupied (a)</i> ..	103,757,901

Total area of State—243,244,800 acres.

(a) Includes surveyed roads, railways and other reserves, 16,477,323 acres; salt water lakes and lagoons, 7,680,000 acres; and fresh water lakes, 224,000 acres.

6. Western Australia.—The total area of Western Australia is 624,588,800 acres, of which, at the 30th June, 1936, 2.7 per cent. was alienated; 2.6 per cent. was in process of alienation; while 32.6 per cent. was occupied under leases and licences issued either by the Lands or the Mines Departments. The balance of 62.1 per cent. was unoccupied.

The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS.—WESTERN AUSTRALIA,
30th JUNE, 1936.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated</i>	16,908,840	3. <i>Leases and Licences in Force</i> —	
2. <i>In Process of Alienation</i> —		(i) Issued by Lands Department—	
Midland Railway Concessions	54,506	Pastoral Leases ..	200,890,464
Free Homestead Farms ..	657,410	Special Leases ..	103,315
Conditional Purchases ..	5,060,691	Leases of Reserves ..	1,048,575
Selections from the late W. A. Company ..	5,297	Residential Lots ..	6,009
Selections under the Agricultural Lands Purchase Act	443,481	(ii) Issued by Mines Department—	
Homestead or Grazing Leases	9,845,342	Gold-mining Leases ..	41,250
Poison Land Leases or Licences	19,312	Mineral Leases ..	30,512
Town and Suburban Lots ..	3,858	Miners' Homestead Leases ..	32,007
		(iii) Issued by Forests Department—	
		Timber Permits ..	1,109,412
Total	16,090,191	Total	203,957,564
		4. <i>Area Unoccupied (a)</i> ..	387,632,205

Total area of State—624,588,800 acres.

(a) Includes reservations for roads and for various public purposes, 42,068,293 acres.

7. Tasmania.—At the end of the year 1935, 34.7 per cent. of the total area had been alienated; 2.7 per cent. was in process of alienation; 16.3 per cent. was occupied under leases and licences for either pastoral, agricultural, timber, or mining purposes, or for closer or soldier settlement; the remainder (46.3 per cent.) was unoccupied or occupied or reserved by the Crown.

The following table shows the distribution :—

**ALIENATION AND OCCUPATION OF CROWN LANDS.—TASMANIA,
31st DECEMBER, 1935.**

Particulars.	Acres.	Particulars.	Acres.
1. Alienated	5,826,838	3. Leases and Licences—continued.	
		(i) Issued by Lands Department	
		—continued.	
2. In Process of Alienation ..	455,922	Soldier Settlement ..	107,000
		Other Leases ..	132,856
3. Leases and Licences—		(ii) Issued by Mines Department	36,549
(i) Issued by Lands Department		Total	2,726,820
Islands	105,000		
Ordinary Leased Land ..	2,016,839		
Land Leased for Timber	247,576	4. Area Occupied by the Crown or	
Closer Settlement ..	81,000	Unoccupied (a)	7,768,420

Total area of State—16,778,000 acres.

(a) Includes reservations for roads and for various public purposes, 1,848,900 acres.

8. Northern Territory.—The area of Northern Territory is 335,116,800 acres, of which, at the 30th June, 1936, only 0.1 per cent. was alienated; 53.9 per cent. was held under leases and licences; while the remaining 46.0 per cent. was unoccupied.

The following shows the mode of occupancy of areas at the 30th June, 1936 :—

**ALIENATION AND OCCUPATION OF CROWN LANDS.—NORTHERN TERRITORY,
30th JUNE, 1936.**

Particulars.	Acres.
1. Alienated	478,079
2. Leased—	
Pastoral Leases	117,789,280
Other leases, licences, reserves and mission stations ..	62,886,840
Total	180,676,120
3. Unoccupied	153,962,601
4. Total area	335,116,800

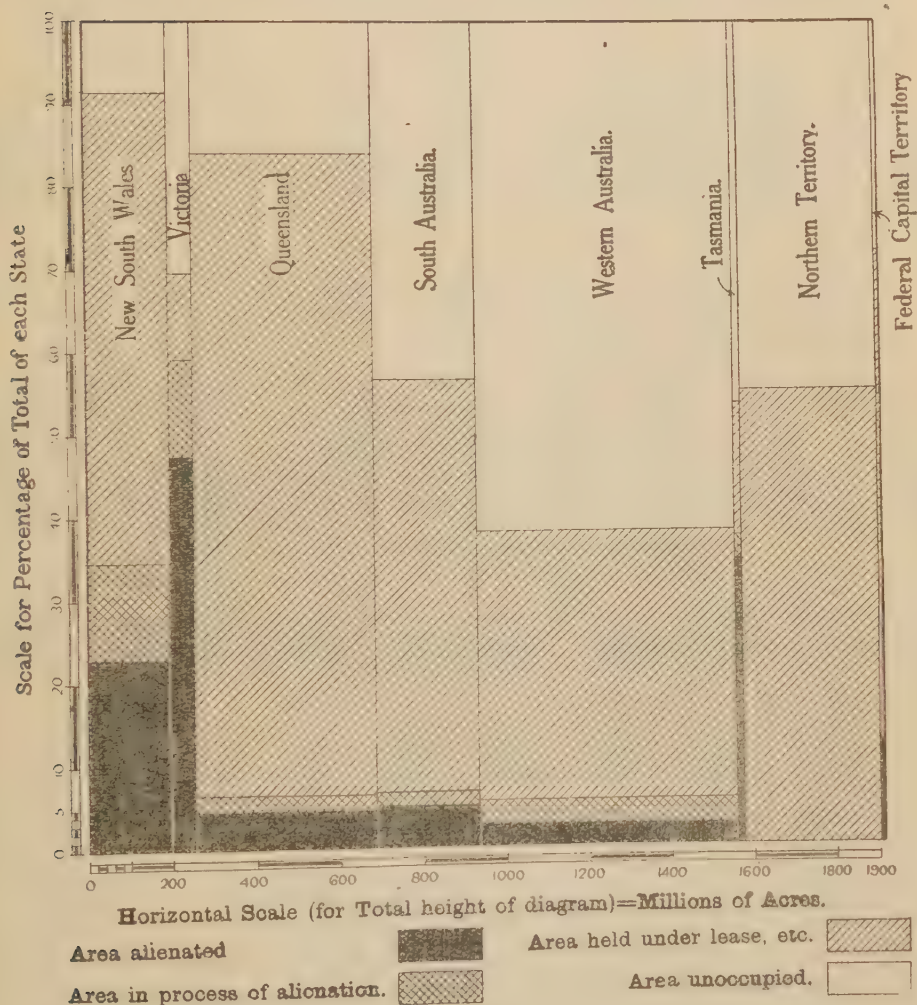
9. Federal Capital Territory.—Particulars of the alienation and occupation of Crown lands in the Territory (exclusive of Jervis Bay area) for the year 1935 are as follows :—Alienated 73,080 acres; in process of alienation 34,098 acres; leased 315,141 acres; and unoccupied 161,341 acres. The area of acquired lands was 213,854 acres. The total area of the Territory (exclusive of Jervis Bay area, 17,920 acres) is approximately 583,660 acres.

Alienated land at the end of 1935 comprised 12.5 per cent. of the total area, land in process of alienation 5.9 per cent., land held under lease 54.0 per cent., and unoccupied land 27.6 per cent. of the total area.

10. Diagram showing Condition of Public Estate.—The following diagram shows the condition of the public estate at the end of the year 1935. The square itself represents the total area of Australia, while the relative areas of individual States are shown by the vertical rectangles. The areas alienated from the State; those in process of alienation

under various systems of deferred payments ; and the areas held under leases or licences are indicated by the differently-shaded areas as described in the reference given below the diagram, while the areas unoccupied are left unshaded.

LAND TENURE



§ 12. Classification of Alienated Holdings According to Size.

The classification of private holdings according to their area is of interest chiefly in relation to the efforts made by the several States in recent years to promote settlement on the land on blocks of suitable size, especially by means of the Closer Settlement Acts.

The following table gives particulars of the number and areas of holdings of alienated land and land in process of alienation at the latest date for which the information has been compiled.

CLASSIFICATION OF HOLDINGS (ONE ACRE AND OVER) IN AREA SERIES, 1933-34.

Size of Holdings.	N.S.W. (d)	Victoria.	Q'land. (b)	S. Aust. (c)	W. Aust.	Tasmania.	Fed.Cap. Ter.	Total (a)
NUMBER.								
1 and under 50 acres	12,431	19,348	4,895	6,400	4,953	2,839	2	50,877
50 " 100 "	6,174	8,475	4,694	1,883	715	2,130	2	24,073
100 " 500 "	23,737	26,635	17,092	5,787	3,997	4,842	8	82,098
500 " 1,000 "	12,281	12,245	3,166	4,513	2,470	713	12	35,400
1,000 " 5,000 "	14,059	7,357	1,792	5,266	9,285	616	16	38,391
5,000 " 10,000 "	1,512	298	91	134	536	93	4	2,668
10,000 " 20,000 "	552	81	36	34	122	51	1	877
20,000 " 50,000 "	225	16	10	9	23	17	..	300
50,000 and over	55	..	4	..	7	4	..	70
Total	71,026	74,455	31,780	24,035	22,108	11,305	45	234,754

AREA.

	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1 and under 50 acres	255,470	374,948	114,063	118,847	60,873	64,245	66	988,512
50 " 100 "	439,042	610,113	352,728	144,657	51,507	151,286	160	1,749,493
100 " 500 "	5,982,107	6,499,014	3,932,885	1,662,229	929,183	905,086	2,123	20,002,621
500 " 1,000 "	8,702,171	8,680,353	2,204,296	3,330,608	1,963,422	484,550	8,874	28,282,570
1,000 " 5,000 "	28,207,833	12,524,655	3,121,906	9,401,700	18,542,088	1,287,530	29,452	73,115,164
5,000 " 10,000 "	10,219,337	2,013,454	628,727	929,107	3,397,800	613,434	32,124	17,834,078
10,000 " 20,000 "	7,343,233	1,105,170	495,824	459,199	1,624,872	604,975	11,002	11,924,289
20,000 " 50,000 "	6,496,667	456,843	202,700	237,112	586,559	448,020	..	8,518,507
50,000 and over	4,659,864	..	1,550,310	..	496,075	321,404	..	7,033,653
Total	72,505,729	32,264,555	12,689,445	16,292,459	27,652,469	5,061,124	83,801	160,549,582

(a) Information not available for the Northern Territory.
and leased and crown lands held in conjunction with freehold (b) The figures for Queensland refer to freehold land
solely for pastoral purposes are not included. (c) Year 1930-31. (d) Including 6,030,087 acres under perpetual
lease.

(b) The figures for Queensland refer to freehold land
solely for pastoral purposes are not included. (c) Year 1930-31. (d) Including 6,030,087 acres under perpetual
lease.

CHAPTER V. TRANSPORT AND COMMUNICATION.

A. SHIPPING.

§ 1. System of Record.

In the system of recording statistics of oversea shipping Australia is considered as a unit, and, therefore, only one entry and one clearance are counted for each voyage, without regard to the number of States visited.

On the arrival at, or departure from, a port in Australia, whether from or for an oversea country or from another port in Australia, the master or agent must "enter" the vessel with the Customs authorities at the port, and supply certain prescribed information in regard to the ship, passengers and cargo. At the end of each month the information so obtained is forwarded to the Commonwealth Bureau of Census and Statistics. Similar documents furnish information regarding oversea migration and interstate migration by sea. This arrangement has been in operation since the 1st July, 1924.

Since the 1st July, 1914, the Trade and Shipping of Australia has been recorded for the fiscal years ending 30th June.

In the following tables, commencing with the year 1935-36, a change has been made in the classification of sailing vessels with auxiliary engines. Particulars of these vessels, previously included in the columns headed "Steam", are now included in those headed "Sailing", as this classification is considered more correct, in view of the fact that the main method of propulsion of these vessels is sail.

§ 2. Oversea Shipping.

1. Total Movement.—The following table gives the number and net tonnage of oversea steam and sailing vessels entering Australian ports during the years 1925-26 to 1935-36:—

TOTAL OVERSEA SHIPPING, ENTERED.—AUSTRALIA.

Year.	Steam.		Sailing.		Total.	
	Vessels.	Net Tons.	Vessels.	Net Tons.	Vessels.	Net Tons.
1925-26	1,537	5,245,222	46	58,583	1,583	5,303,805
1926-27	1,598	5,512,840	26	46,030	1,624	5,558,870
1927-28	1,544	5,373,485	33	45,560	1,577	5,419,045
1928-29	1,564	5,521,725	18	29,858	1,582	5,551,583
1929-30	1,499	5,413,192	23	31,254	1,522	5,444,446
1930-31	1,517	5,562,230	17	19,287	1,534	5,581,517
1931-32	1,497	5,653,731	22	33,167	1,519	5,686,898
1932-33	1,531	5,891,878	23	41,446	1,554	5,933,324
1933-34	1,356	5,308,584	24	43,987	1,380	5,352,571
1934-35	1,559	5,951,226	23	43,024	1,582	5,994,250
1935-36	1,550	6,199,583	(a) 65	(a) 38,093	1,615	6,237,676

(a) See last paragraph, § 1, above.

The average tonnage per vessel entered has risen from 3,350 tons per vessel in 1925-26 to 3,862 tons in 1935-36.

Particulars regarding the total oversea movement of shipping for each year from 1822 to 1920-21 will be found in Official Year Book No. 15, p. 507.

2. Shipping Communication with various Countries.—Records, as they are invariably made, of the number and tonnage of vessels arriving from and departing to particular countries may be misleading for the reason that the tonnage of a vessel can be recorded against one country only, notwithstanding that the same vessel on the same voyage may carry cargo or passengers to or from Australia for several countries. For

instance, a mail steamer on a voyage from the United Kingdom to Australia, through the Suez Canal, may call at Marseilles, Genoa, Port Said, Aden and Colombo, yet can be credited only to the United Kingdom, the country where the voyage commenced, to the exclusion of all of the others from the records. Also a number of vessels touch at New Zealand ports on their voyages to and from the United States of America and Canada, but their tonnages are not included in the records of Australian shipping trade with New Zealand. Similarly, the record of shipping engaged in trade between Australia and the United Kingdom via South African ports does not show tonnage to and from South Africa, the whole of it being included in the figures for United Kingdom. In view of this defect, statistics relating to the direction of the shipping to and from Australia are restricted to the following tables in which countries situated on the main trade routes are grouped together. This grouping into larger geographical divisions to some extent avoids the limitations referred to, except, as already pointed out, in the case of Africa and New Zealand.

OVERSEA SHIPPING, AUSTRALIA—DIRECTION.

Countries.	Cargo and Ballast.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
NET TONNAGE ENTERED.						
United Kingdom and European Countries	Cargo	1,524,673	1,549,889	1,644,837	1,698,613	1,812,263
	Ballast	503,997	940,342	485,391	376,291	281,157
New Zealand	Cargo	426,704	448,084	469,343	539,443	557,091
	Ballast	97,781	110,559	92,913	107,662	134,200
Asiatic Countries and Islands in the Pacific	Cargo	1,182,412	1,294,014	1,313,042	1,474,957	1,721,540
	Ballast	895,825	441,286	149,376	520,769	353,102
Africa	Cargo	7,836	19,129	13,394	22,535	34,983
	Ballast	226,226	144,699	143,275	143,468	172,302
North and Central America	Cargo	802,672	966,985	1,041,000	1,105,873	1,161,903
	Ballast	..	12,088	..	..	6,240
South America	Cargo	2,821	2,649	..	2,639	2,895
	Ballast	16,151	..	..	..	..
	Cargo	3,946,918	4,278,350	4,481,616	4,846,060	5,290,675
	Ballast	1,739,980	1,654,974	870,955	1,148,190	947,001
Total .. ..	..	5,686,898	5,933,324	5,352,571	5,994,250	6,237,676

NET TONNAGE CLEARED.

United Kingdom and European Countries	Cargo	2,673,463	2,496,405	2,495,377	2,517,126	2,719,463
	Ballast	5,680	11,783	8,447	50,304	10,700
New Zealand	Cargo	385,088	460,037	512,490	512,487	537,359
	Ballast	66,739	93,613	40,816	28,863	73,948
Asiatic Countries and Islands in the Pacific	Cargo	1,647,769	1,657,465	1,199,738	1,653,931	1,605,483
	Ballast	249,981	440,372	440,489	422,053	526,048
Africa	Cargo	42,096	33,567	22,220	35,573	50,108
	Ballast	56	2,627	2,627	..	344
North and Central America	Cargo	488,134	542,663	536,061	615,644	591,144
	Ballast	130,270	146,511	148,268	83,355	87,944
South America	Cargo	19,631	23,272	5,077	5,398	4,710
	Ballast	..	..	..	..	3,615
	Cargo	5,256,181	5,213,409	4,770,663	5,340,159	5,598,276
	Ballast	452,705	694,907	640,647	554,635	708,608
Total .. ..	..	5,708,886	5,908,316	5,411,310	5,894,794	6,306,884

3. Nationality of Oversea Shipping.—The greater part of the shipping visiting Australia is of British nationality. The proportion of British tonnage increased by 1.89 per cent. during 1935-36 and was the highest recorded since 1929-30, when the percentage was 73.43. Likewise the percentage of vessels arriving with cargo was the greatest since the figure of 93.22 in 1929-30.

Particulars of the nationality of oversea shipping for the last five years are given in the following table:—

OVERSEA SHIPPING, AUSTRALIA—NATIONALITY OF VESSELS ENTERED.

Nationality.	Net Tonnage.				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
BRITISH—					
Australian	230,996	264,848	289,172	310,186	314,439
United Kingdom	3,138,330	3,218,273	2,788,464	3,137,192	3,334,332
Canadian	42,032	54,228	79,268	76,101	95,889
New Zealand	260,628	291,329	335,513	321,481	322,296
Other British	59,905	115,681	221,647	215,597	276,162
Cargo	2,680,856	2,831,878	3,032,040	3,323,552	3,732,921
Ballast	1,051,035	1,112,481	682,024	737,005	610,197
Total British	3,731,891	3,944,359	3,714,064	4,060,557	4,343,118
Per cent. on total	65.62	66.48	69.39	67.74	69.63
FOREIGN—					
Danish	46,061	107,052	75,753	48,613	54,680
Dutch	156,617	185,342	164,469	176,424	150,012
French	90,552	108,032	114,715	137,142	102,031
German	116,004	117,589	121,829	134,231	126,500
Italian	68,220	76,674	83,055	62,205	39,465
Japanese	688,712	546,088	333,109	461,400	464,311
Norwegian	395,269	394,470	335,775	426,539	462,884
Swedish	111,196	136,059	110,927	141,265	134,502
United States	205,485	245,530	247,959	240,474	233,047
Other Foreign	76,891	72,129	50,916	105,400	127,117
Cargo	1,266,062	1,446,472	1,449,576	1,522,508	1,557,754
Ballast	688,945	542,493	188,931	411,185	336,804
Total Foreign	1,955,007	1,988,965	1,638,507	1,933,693	1,894,558
Per cent. on total	34.38	33.52	30.61	32.26	30.37
Cargo	3,946,918	4,278,350	4,481,616	4,846,060	5,290,675
Per cent. on total	69.40	72.11	83.73	80.85	84.82
Ballast	1,739,980	1,654,974	870,955	1,148,190	947,001
Per cent. on total	30.60	27.89	16.27	19.15	15.18
Grand Total	5,686,898	5,933,324	5,352,571	5,994,250	6,237,676

The Australian tonnage which entered Australia from overseas during the year 1935-36 represented 5.04 per cent. of the total tonnage entered and was mainly confined to the New Zealand and Pacific Island trade.

§ 3. Shipping of Ports.

The total shipping tonnage—oversea, interstate and coastwise—which entered the more important ports of Australia during the year 1935-36, together with similar information in regard to some of the ports of New Zealand and of Great Britain for the year 1935, will be found in the next table:—

SHIPPING OF PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.
AUSTRALIA—		ENGLAND AND WALES—	
Sydney (N.S.W.) ..	10,479,774	London ..	29,073,932
Melbourne (Vic.) ..	8,056,623	Liverpool (including Birkenhead) ..	16,640,562
Adelaide (S.A.) ..	5,061,747	Southampton ..	12,508,709
Newcastle (N.S.W.) ..	4,422,581	Tyne Ports ..	8,595,806
Brisbane (Qld.) ..	4,367,197	Cowes (including coast of Isle of Wight) ..	6,637,567
Fremantle (W.A.) ..	3,613,611	Cardiff ..	6,568,276
Townsville (Qld.) ..	1,283,983	Hull ..	6,132,946
Hobart (Tas.) ..	1,076,761	Plymouth ..	5,799,532
Geelong (Vic.) ..	1,069,530	Manchester (including Runcorn) ..	3,904,309
Kembla (N.S.W.) ..	851,609	Bristol ..	3,555,827
Whyalla (S.A.) ..	772,000	Swansea ..	3,460,582
Pirie (S.A.) ..	770,588	Dover ..	3,031,239
Burnie (Tas.) ..	663,471	Blyth ..	2,994,591
Cairns (Qld.) ..	656,478	Middlesbrough ..	2,924,602
Launceston (Tas.) ..	490,665	Harwich ..	2,850,553
Lincoln (S.A.) ..	458,142	Sunderland ..	2,626,228
Mackay (Qld.) ..	425,958	Portsmouth ..	2,408,973
Rockhampton (Qld.) ..	394,791	Newport ..	2,265,594
Devonport (Tas.) ..	374,320	SCOTLAND—	
Gladstone (Qld.) ..	374,024	Glasgow ..	5,703,015
Albany (W.A.) ..	344,732	Greenock (including Port Glasgow) ..	3,038,134
Wallaroo (S.A.) ..	337,360	Leith ..	2,076,777
Thursday Island (Qld.) ..	302,268	NORTHERN IRELAND—	
NEW ZEALAND—		Belfast ..	7,161,230
Wellington ..	3,666,736		
Auckland ..	2,755,138		
Lyttleton ..	2,008,495		
Otago ..	1,021,942		

Figures relating to ports of the United Kingdom have been obtained from the British Board of Trade's Statement of Navigation and Shipping for the year 1935, and those relating to New Zealand ports from the New Zealand Statistical Report on Trade and Shipping for the same year.

§ 4. Vessels Built and Registered.

1. **Vessels Built.**—The following table shows the number and tonnage of vessels built in Australia during each of the calendar years 1932 to 1936, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, does not, however, make it compulsory to register vessels under 15 tons burthen if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners.

VESSELS BUILT IN AUSTRALIA.
NUMBERS AND TONNAGES.

Year.	Steam.				Motor.				Sailing.				Pontoon, Dredges, &c.				Total.			
	Tonnages.				Tonnages.				Tonnages.				Tonnages.				Tonnages.			
	No.				No.				No.				No.				No.			
	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.	Gross.	Net.
1932	10	207	140	2	15	15	..	..	..	..	..	..	12	222	155	..
1933	4	144	118	2	20	18	1	779	645	7	943	781	..	..	..	..
1934	17	506	315	4	88	87	..	..	..	..	..	..	21	594	402	..
1935	14	360	272	1	16	14	..	..	..	..	..	..	15	376	286	..
1936 ..	2	719	192	8	401	265	..	..	..	..	..	..	..	..	..	..	10	1,120	457	..

2. **Vessels Registered.**—The following table shows the number and net tonnage of steam, sailing and other vessels on the registers of the States and of the Northern Territory on the 31st December, 1936 :—

VESSELS ON THE STATE REGISTERS, 31st DECEMBER, 1936.

State or Territory.	Steam and Motor.				Sailing.				Barges, Hulks, Dredges, &c., not Self-propelled.		Total.	
	Dredges and Tugs.		Other.		Fitted with Auxiliary Power.		Other.					
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.
New South Wales ..	43	859	309	63,075	285	9,373	209	6,849	46	12,065	892	92,221
Victoria ..	35	3,244	128	157,170	57	1,261	44	675	56	23,319	320	185,669
Queensland ..	15	2,224	27	4,651	64	2,776	89	1,222	24	3,464	219	14,337
South Australia ..	11	337	60	8,559	55	2,435	52	3,092	22	5,243	200	19,666
Western Australia ..	9	173	28	5,810	31	604	285	4,399	19	4,277	372	15,263
Tasmania ..	5	530	40	3,880	70	1,884	67	2,517	1	382	183	9,193
Northern Territory	..	..	..	..	4	69	15	145	..	..	19	214
Total ..	118	7,367	592	243,145	566	18,402	761	18,899	168	48,750	2,205	336,563

3. **World's Shipping Tonnage.**—The table hereunder shows the number and gross tonnage of steam and motor, and of sailing vessels owned by the most important maritime countries, together with the proportion of the grand total owned by each country :—

WORLD'S SHIPPING TONNAGE, 1st JULY, 1936.

Nationality.	Steam and Motor.		Sailing.		Total.		Percentage on Total.	
	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.
Great Britain and Nthn. Ireland ..	6,891	17,182,857	355	102,602	7,246	17,285,459	23.43	26.57
Australia and New Zealand ..	523	637,504	11	4,636	534	642,140	1.73	0.99
Canada (a) ..	798	1,291,351	96	64,980	894	1,356,331	2.89	2.08
Other British ..	867	1,061,271	163	39,937	1,030	1,101,208	3.33	1.69
Total, British Empire ..	9,079	20,172,983	625	212,155	9,704	20,385,138	31.38	31.33
Belgium ..	179	388,413	..	..	179	388,413	0.58	0.60
Denmark ..	695	1,134,029	6	1,485	701	1,135,514	2.27	1.75
France ..	1,349	2,972,979	80	29,476	1,429	3,002,455	4.59	4.61
Germany ..	2,085	3,708,202	9	10,215	2,094	3,718,417	6.77	5.72
Greece ..	606	1,800,850	..	..	606	1,800,850	1.96	2.77
Holland ..	1,408	2,507,354	12	3,927	1,420	2,511,281	4.59	3.86
Italy ..	1,072	3,056,753	174	41,406	1,246	3,098,159	4.03	4.76
Japan ..	2,367	4,215,690	..	..	2,367	4,215,690	7.65	6.48
Norway ..	1,857	4,053,655	2	830	1,859	4,054,485	6.02	6.23
Spain ..	861	1,145,531	50	11,806	911	1,157,337	2.95	1.78
Sweden ..	1,244	1,506,557	15	8,360	1,259	1,514,917	4.07	2.33
United States of America (b) ..	3,120	11,986,851	456	569,712	3,576	12,556,563	11.56	19.30
Other Foreign Countries ..	3,284	5,355,038	297	169,386	3,581	5,524,424	11.58	8.48
Total, Foreign Countries ..	20,118	43,831,902	1,101	846,603	21,219	44,678,505	68.62	68.67
Grand Total ..	29,197	64,004,885	1,726	1,058,758	30,923	65,063,643	100.00	100.00

(a) Including Great Lakes shipping.

(b) Including Philippine Islands and Great Lakes shipping.

The foregoing figures have been compiled from *Lloyd's Register of Shipping*, and vessels of 100 tons or upwards only have been included.

§ 5. Interstate Shipping.

1. **System of Record.**—*Interstate Shipping* comprises two elements, viz.:—(a) Vessels engaged solely in interstate trade; and (b) Vessels trading between Australia and oversea countries and in the course of their voyage proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not now engage in interstate carrying.) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the overseas vessels (b) some explanation is necessary. Each State desires that its shipping statistics (which are prepared in the Commonwealth Bureau of Census and Statistics) shall show in full its shipping communication with oversea countries, but at the same time it is necessary to avoid any duplication in the statistics for Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an overseas country—say United Kingdom—*via* another State, is recorded in the second State as from United Kingdom, *via* States, thus distinguishing the movement from a *direct* oversea entry. Continuing the voyage, the vessel is in the third State again recorded for the statistics of the State concerned as from United Kingdom *via* other States. On an inward voyage the *clearance* from the first State to the second State is a *clearance* interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as “Oversea *via* other States” or “Interstate” according to the direction of the movement. The significance of the record of these movements will be more clearly seen from the following tabular presentation of the inward and outward voyages to and from Australia of a mail steamer which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage—Sydney (New South Wales)—*via* the States of South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, and retrace its inward track.

ITINERARY OF AN OVERSEAS VESSEL ON AUSTRALIAN COAST.

Particulars.	Recorded as—	
	For the State and for Australia.	For the States.
Inward Voyage—		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide .. ..	.. ..	Interstate direct
Enters Adelaide from United Kingdom	.. ..	.. ..
via Fremantle .. ..	.. ..	Oversea <i>via</i> States
Clears Adelaide for Melbourne .. ..	.. ..	Interstate direct
Enters Melbourne from United Kingdom	.. ..	.. ..
via Adelaide .. ..	.. ..	Oversea <i>via</i> States
Clears Melbourne for Sydney .. ..	.. ..	Interstate direct
Enters Sydney from United Kingdom	.. ..	.. ..
via Melbourne .. ..	.. ..	Oversea <i>via</i> States
Outward Voyage—		
Clears Sydney for United Kingdom <i>via</i>		
Melbourne .. ..	.. ..	Oversea <i>via</i> States
Enters Melbourne from Sydney .. ..	.. ..	Interstate direct
Clears Melbourne for United Kingdom <i>via</i>		
Adelaide .. ..	.. ..	Oversea <i>via</i> States
Enters Adelaide from Melbourne .. ..	.. ..	Interstate direct
Clears Adelaide for United Kingdom <i>via</i>		
Fremantle .. ..	.. ..	Oversea <i>via</i> States
Enters Fremantle from Adelaide .. ..	.. ..	Interstate direct
Clears Fremantle for United Kingdom ..	Oversea direct	

From the method outlined above, the requirements for Australia and for the individual States are ascertained as follows:—(a) The aggregate of all ships recorded for each State as “Oversea *direct*” gives the overseas shipping for Australia as a whole. (b) The aggregate

for all ships recorded in any State as "Oversea direct" plus those recorded as "Oversea via States" gives the total *oversea shipping* for that State. (c) From the example given in the table it may be noticed that for every entry "Oversea via States" there is a corresponding clearance "Interstate," so that according to the purpose for which the figures are required, the movements of "oversea ships via States" can be added to the recorded interstate shipping, and thus furnish figures showing the total interstate *movement* of shipping, or a similar deduction may be made from the recorded interstate shipping to give the total movement of shipping engaged solely in interstate trade. This last calculation is not strictly accurate, as it is based on the assumption that for every arrival "Oversea via States" there is a corresponding departure "Interstate direct," which is not actually so, for all overseas vessels do not follow the same itinerary as the vessel in the table above.

2. **Vessels and Tonnage Entered.**—(*Interstate direct.*) The following table gives the number and tonnage of vessels recorded as having entered each State from any other State during each of the years 1931-32 to 1935-36. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is not included:—

INTERSTATE SHIPPING.—NUMBER AND TONNAGE OF VESSELS ENTERED.

State or Territory.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
NUMBER.					
New South Wales	1,483	1,656	1,679	1,945	1,862
Victoria	1,494	1,678	1,777	1,908	1,966
Queensland	483	485	508	587	567
South Australia	598	644	694	842	865
Western Australia	311	309	326	347	358
Tasmania	933	984	1,008	1,035	1,065
Northern Territory	19	20	23	27	22
Total	5,321	5,776	6,015	6,691	6,705

NET TONNAGE.					
New South Wales	3,947,128	4,583,979	4,664,917	5,334,778	5,105,740
Victoria	3,154,197	3,594,992	3,791,069	4,062,750	4,361,171
Queensland	1,123,578	1,184,471	1,281,334	1,410,487	1,495,200
South Australia	2,176,155	2,191,498	2,335,796	2,761,195	2,898,358
Western Australia	1,643,755	1,695,267	1,763,371	1,855,563	1,916,546
Tasmania	1,094,767	1,255,877	1,282,947	1,101,544	1,335,725
Northern Territory	51,570	53,553	56,694	59,011	66,710
Total	13,191,150	14,559,637	15,176,128	16,585,328	17,179,450

3. **Oversea Vessels Moving Interstate.**—(*Oversea via States.*) To ascertain the aggregate movement of shipping between the States during the year 1935-36, including the total interstate movements of overseas vessels, the figures in the following table,

which give the number and tonnage of vessels entered from or cleared for overseas countries via other Australian States, must be added to those in the table preceding:—

SHIPPING ENTERED AND CLEARED FROM AND TO OVERSEA COUNTRIES VIA OTHER AUSTRALIAN STATES, 1935-36.

State or Territory.	Entered.		Cleared.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales ..	531	2,691,282	568	2,924,916	1,099	5,616,198
Victoria ..	512	2,724,884	562	3,079,255	1,074	5,804,139
Queensland ..	267	1,652,002	277	1,605,834	544	3,257,836
South Australia ..	347	1,932,832	313	1,825,401	660	3,758,233
Western Australia ..	35	122,494	18	70,285	53	192,779
Tasmania ..	105	554,455	127	733,488	232	1,287,943
Northern Territory ..	..	..	..	..	..	..
Total ..	1,797	9,677,949	1,865	10,239,179	3,662	10,917,128

Overseas vessels moving interstate are with few exceptions not engaged in the active interstate trade of Australia, but are merely proceeding to the several States in continuation of their overseas voyage.

4. **Vessels engaged Solely in Interstate Trade.**—Eliminating all interstate movements of overseas vessels, the movements of vessels engaged solely in the interstate trade for Australia as a whole during the years 1931-32 to 1935-36 are shown below:—

NUMBER AND TONNAGE OF VESSELS ENGAGED SOLELY IN INTERSTATE TRADE ENTERED AND CLEARED.—AUSTRALIA.

Year.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1931-32	3,958	5,512,175	3,999	5,557,763
1932-33	4,208	5,771,627	4,170	5,789,251
1933-34	4,380	5,927,623	4,379	6,095,043
1934-35	4,946	6,884,789	4,955	6,976,104
1935-36	4,840	6,940,271	4,846	6,943,714

The above figures are approximate only. See last paragraph §.5, I, p. 115.

5. **Total Interstate Movement of Shipping.**—(i) *Australia.* The appended table shows the total interstate movement of shipping including overseas vessels moving interstate for each of the years 1931-32 to 1935-36:—

TOTAL INTERSTATE MOVEMENT OF SHIPPING.—AUSTRALIA.

Year.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1931-32	6,631	20,475,864	6,672	20,521,452
1932-33	7,226	22,397,933	7,188	22,415,557
1933-34	7,463	23,114,881	7,462	23,282,301
1934-35	8,279	25,369,207	8,288	25,460,522
1935-36	8,502	26,857,399	8,508	26,860,842

(ii) *States.* The following table shows the number and tonnage of vessels which entered and cleared each State from and for other States during 1935-36, including the coastal movements of oversea vessels :—

INTERSTATE SHIPPING OF EACH STATE, 1935-36.

State or Territory.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales	2,393	7,797,022	2,403	7,991,692
Victoria	2,478	7,086,055	2,515	7,209,427
Queensland	834	3,147,202	848	3,084,349
South Australia	1,212	4,831,190	1,193	4,739,716
Western Australia	393	2,039,040	330	1,847,438
Tasmania	1,170	1,890,180	1,196	1,919,312
Northern Territory	22	66,710	23	68,908
Total, Australia	8,502	26,857,399	8,508	26,860,842

6. *Interstate and Coastal Services.*—The subjoined table gives particulars, so far as they are available, of all steamships engaged in regular interstate or coastal services at the end of each of the years 1932 to 1936 :—

INTERSTATE AND COASTAL STEAMSHIP SERVICES.—AUSTRALIA.

Particulars.	1932.	1933.	1934.	1935.	1936.
Number of companies operating ..	31	30	31	30	29
Number of steamships ..	154	154	155	156	161
Tonnage { Gross	306,878	309,309	302,897	324,801	302,237
Net	171,089	172,334	168,056	180,468	202,881
Horse-power (Nominal) ..	33,340	34,514	33,510	36,037	38,133
Number of { 1st class	4,031	3,939	3,914	4,311	4,748
passengers { 2nd class and steer-					
for which { age	1,755	1,755	1,755	1,920	1,799
licensed(a) { Masters and officers ..	498	512	505	513	641
Complement { Engineers	514	529	419	548	589
of Crew { Crew	4,072	4,193	4,045	4,264	4,500

(a) Exclusive of purely day passenger accommodation

§ 6. Tonnage of Cargo.

1. *Oversea and Interstate Cargo.*—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea cargo discharged and shipped and the tonnage of interstate cargo shipped in all ports for the years 1931-32 to 1935-36. Cargo which was stated in cubic feet has been converted to tons measurement on the basis of 40 cubic feet to the ton.

CARGO MOVEMENT.

Year.	Oversea Cargo.				Interstate Cargo.	
	Discharged.		Shipped.		Shipped.	
	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.
1931-32 ..	2,072,334	894,380	5,951,914	726,040	3,002,327	1,007,351
1932-33 ..	2,679,800	1,217,218	5,641,926	778,579	3,819,654	1,047,054
1933-34 ..	2,606,101	1,395,291	4,260,182	738,846	4,278,159	1,201,617
1934-35 ..	2,969,914	1,722,485	5,220,757	857,976	5,244,386	1,346,422
1935-36 ..	3,531,839	1,948,508	5,214,194	893,509	5,540,938	1,502,813

(ii) *Principal Ports.* The following table shows the tonnage of Oversea and Interstate Cargo discharged and shipped at principal ports, 1935-36 :—

TONNAGE OF CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1935-36.

Port.	Discharged.			Shipped.		
	Oversea.	Interstate.	Total.	Oversea.	Interstate.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sydney	1,812,966	1,077,869	2,890,835	1,449,768	785,362	2,235,130
Newcastle	128,458	1,266,415	1,394,873	285,981	1,990,887	2,276,868
Kembla	42,494	319,736	362,230	83,523	171,879	255,402
Other .. ..	..	..	..	15,663	49,161	64,824
Total, New South Wales	1,983,918	2,664,020	4,647,938	1,834,935	2,997,289	4,832,224
Melbourne	1,613,126	2,042,293	3,655,419	909,933	881,781	1,790,814
Geelong	187,519	180,365	367,884	269,624	79,413	349,037
Other	15,127	8,736	23,863	5,599	4,007	9,606
Total, Victoria	1,815,772	2,231,394	4,047,166	1,184,256	965,201	2,149,457
Brisbane	323,142	480,733	803,875	184,807	195,382	380,189
Cairns	9,725	34,580	44,305	87,460	90,602	178,062
Townsville	53,137	58,231	111,368	110,867	74,942	185,809
Other	14,401	47,889	62,290	181,142	79,363	260,505
Total, Queensland	400,405	621,433	1,021,838	564,276	440,289	1,004,565
Adelaide	474,692	707,391	1,182,083	414,348	362,267	776,615
Pirie	135,803	184,027	319,830	415,301	135,732	551,033
Wallaroo	22,179	3,930	26,109	175,932	15,385	191,317
Whyalla .. ..	..	..	..	432,498	1,288,022	1,720,520
Other	14,892	2,960	17,852	224,816	11,040	235,856
Total, South Australia	647,566	898,308	1,545,874	1,662,895	1,812,446	3,475,341
Fremantle	484,803	296,785	781,588	423,650	44,754	468,404
Bunbury	35,329	367	35,696	129,830	20,286	150,116
Geraldton	33,813	101	33,914	74,550	2	74,552
Other	3,814	10,191	14,005	46,747	15,616	62,363
Total, Western Australia	557,759	307,444	865,203	674,777	80,658	755,435
Hobart	67,594	286,711	354,305	155,169	192,490	347,659
Launceston	6,304	99,064	105,368	30,860	77,585	108,445
Devonport	205	25,015	25,220	6	324,892	324,898
Other .. ..	..	60,446	60,446	96	149,690	149,786
Total, Tasmania	74,103	471,236	545,339	186,131	744,657	930,788
Darwin (Northern Territory)	824	11,079	11,903	433	3,211	3,644
Total, AUSTRALIA	5,480,347	7,204,914	12,685,261	6,107,703	7,943,751	13,151,454

2. **Nationality.**—The following table shows the total oversea cargo discharged and shipped according to the nationality of the vessels carrying during the years 1931-32 to 1935-36 :—

OVERSEA CARGO DISCHARGED AND SHIPPED.—TONS.(a)

Vessels Registered at Ports in—	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
British—					
Australia	223,841	229,930	257,497	307,440	329,208
United Kingdom	5,429,998	5,644,962	4,796,937	5,813,352	6,184,120
Canada	64,169	88,733	115,125	127,379	154,914
New Zealand	260,988	317,821	357,087	323,630	398,238
Other British	134,739	221,606	403,757	392,606	534,585
Total British	6,113,735	6,503,052	5,930,403	6,964,407	7,508,065
Per cent. on Total	63.39	63.03	65.89	64.66	65.57
Foreign—					
Denmark	137,378	296,265	184,626	154,172	160,285
France	76,666	95,977	108,736	169,802	140,435
Germany	248,983	258,915	276,821	297,020	340,544
Italy	73,962	107,503	103,921	66,319	33,520
Japan	1,101,303	1,071,568	635,142	913,552	914,856
Netherlands(b)	254,768	313,188	280,509	308,187	228,726
Norway	876,991	883,810	814,447	1,023,612	1,207,673
Sweden	313,986	418,101	325,114	408,462	390,080
United States of America	232,182	226,033	246,858	240,271	300,074
Other Foreign	154,714	143,111	93,843	225,328	266,892
Total Foreign	3,530,933	3,814,471	3,070,017	3,806,725	3,989,985
Per cent. on Total	36.61	36.97	34.11	35.34	34.43
Grand Total	9,644,668	10,317,523	9,000,420	10,771,132	11,588,050

(a) Tons weight and tons measurement combined.

(b) Includes Netherlands East Indies.

NOTE.—A summary of particulars relating to Shipping and Cargo for the year 1936-37 will be found in the Appendix to this volume.

§ 7. Miscellaneous.

1. **Lighthouses.**—Transport and Communication Bulletin No. 14, published by this Bureau, contained a list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars were available.

2. **Distances by Sea.**—A statement giving the distances by sea between the ports of the capital cities of Australia and the most important ports in other countries which trade with Australia was also included in Transport and Communication Bulletin No. 14.

3. **Shipping Freight Rates.**—The Quarterly Summary of Australian Statistics gives a list of the ruling freight rates for general merchandise both in respect of oversea and interstate shipments. The latest figures available, which give the rates current at 31st March, 1937, show that the rate for general merchandise from Australia to United Kingdom and Continent was 63s. per ton weight or measurement, while the rates for wheat and wool (greasy) were respectively 42s. 6d. per ton weight and 1½d. per lb. plus 5 per cent., less 10 per cent. The charter rates for wheat ranged between 37s. 6d. and 43s. per ton.

4. **Depth of Water at Main Ports.**—A table compiled from information supplied by the Director of Navigation showing the depth of water at the main ports of Australia at 1st January, 1937, was included in the Transport and Communication Bulletin No. 27, published by this Bureau.

5. **Shipping Casualties.**—Courts of Marine Inquiry are constituted by a Magistrate assisted by skilled assessors, and when necessary are held at the principal port in each

State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping casualties reported on or near the coast during the year 1936 are shown in the Transport and Communication Bulletin No. 27. This information also was furnished by the Director of Navigation.

6. *Commonwealth Navigation and Shipping Legislation.*—(i) *General.* An account in some detail of the Commonwealth Navigation and Shipping Legislation was published in Official Year Book No. 17 (pp. 1053-5).

(ii) *Amending Acts.* Under an amendment of the Principal Act made by the Navigation Act 1926 permission may be granted by the Governor-General in Council to unlicensed British ships to engage in the carriage of passengers between any Commonwealth ports where injury is being done to the tourist traffic. By Order in Council under this provision, British vessels of not less than 10,000 tons gross register and of a speed of not less than 15 knots (reduced in December, 1928, to 14 knots) were granted permission—as exempt from the coasting trade provisions of the Act—to engage in the carriage of passengers between the port of Hobart and the ports of Brisbane, Sydney and Melbourne during certain specified periods in the tourist seasons.

The principal Act was further amended by the Navigation (Maritime Conventions) Act 1934 to implement, and to enable the Commonwealth Government to ratify, a number of International Maritime Conventions, the principal of which were the International Convention for the Safety of Life at Sea, 1929, and the International Convention Respecting Load Lines, 1930.

By the Navigation Act of 1935 Section 7 of the Principal Act was amended to permit British ships of not less than 10,000 tons gross tonnage and a sea speed of not less than 14 knots to carry passengers between ports in Australia not connected by rail without being deemed to engage in the coasting trade within the meaning of the Navigation Act, subject to the condition that such carriage of passengers is without break of journey, transshipment or second call at any intermediate port. Section 231 of the Principal Act was also amended by the Act of 1935 to make provision for the carriage of wireless telegraphy installation by the smaller cargo steamships engaged in interstate trade. Provision has also been made in some States for the carriage of wireless equipment on intra-state vessels.

In an effort to protect the interests of British shipping in the Pacific against subsidized foreign competition the New Zealand Government recently introduced a measure prohibiting foreign vessels from embarking passengers or cargo in a New Zealand port for any destination in Australia. On 3rd December, 1936, the British Shipping Protection Bill, designed to implement the New Zealand legislation, was introduced into the Australian Senate. After the speech on the second reading, the debate was adjourned until the session of Parliament in 1937. In view of later developments, however, it is possible that it will not be necessary to pass this legislation, as discussions at the second meeting of the Pacific sub-committee of the committee on shipping questions, held in London on the 26th May, 1937, seemed to indicate a reconciliation of the view-points of the interested nations.

7. *Ports and Harbours.* A report in two volumes on "Transport in Australia", with special reference to Ports and Harbours facilities, was submitted to the Commonwealth Government by Sir George Buchanan, and published as two Parliamentary Papers (No. 86 printed 14th March, 1927, and No. 108 printed 9th May, 1927).

B. RAILWAYS.

§ 1. General.

1. *Introduction.*—In the following pages statistics relating to State-owned lines are, in the main, dealt with separately from those under the control of the Commonwealth Government. The railways owned by the different States are referred to throughout as "State" and those owned by the Commonwealth as "Federal" railways.

2. *Improvement of Railway Statistics.*—Earlier issues of the Year Book contain a condensation of the report issued in 1900 by the Commonwealth Statistician to the Minister for Home Affairs on the subject of "The Desirability of Improved Statistics of Government Railways in Australia" (see Year Book No. 7, page 598).

Considerable improvement, both as regards the volume of information and the mode of presentation thereof in the statistical tables appearing in the reports of the several Railway Commissioners, has been made during recent years.

In an endeavour to adhere more closely to the figures used by the Railways Commissioners in relation to their financial operations and to obtain greater uniformity in the presentation of the particulars of the various systems, certain changes have been made in the compilation of Railways Statistics for the year 1935-36. The figures relating to this year will not, therefore, in all cases, be entirely comparable with those of previous years, although generally the differences occasioned are relatively small.

3. **Railway Communication in Australia.**—An account of the progress of railway construction in Australia since the opening of the first line in 1854 will be found in Year Book No. 6, p. 681. Further information regarding railway communication in Australia and proposals for unification of gauge in the various systems are given in Year Book No. 22, pp. 259 to 261.

4. **Grafton-South Brisbane (Uniform Gauge) Line.**—The line from Grafton (New South Wales) to Brisbane (Queensland) which was opened for traffic on 27th September, 1930, was constructed to overcome the break of gauge between Sydney and Brisbane, and is the first step towards uniform gauge railway communication between the capitals of the mainland States. It was constructed under agreement between the Commonwealth and the States of New South Wales and Queensland, and is of 4 ft. 8½ in. gauge. The work consisted of regrading and relaying the existing New South Wales line between Grafton and Kyogle and the construction of a new line 94.82 miles in length from Kyogle (New South Wales) to South Brisbane (Queensland). Under the agreement, the Commonwealth in the first instance provided the cost of the work, of which one-fifth was deemed to have been on behalf of the Commonwealth, and four-fifths on behalf of the five mainland States of the Commonwealth collectively on a population basis. The agreement also provides that if in any financial year the earnings from the line exceed the working expenses, the excess shall be applied in paying to the Commonwealth the interest on the money provided by it on behalf of the States and the Commonwealth. The order in which such excess shall be applied is laid down in the agreement, and provides that the interest on the quotas of Victoria, South Australia and Western Australia shall be paid first, then the interest on the quotas of Queensland and New South Wales, and lastly the interest on the quota of the Commonwealth. Any balance remaining after payment of interest will be returned to Queensland and New South Wales. The States of Victoria, South Australia and Western Australia did not enter into the agreement, and the quotas of these States were assumed by the Commonwealth. To 30th June, 1936, the capital cost of construction and equipment was £4,362,500, the interest charge for the year 1935-36 being £218,125. During the same period, the working of the line, which is the responsibility of the New South Wales and Queensland Railways Commissioners, resulted in a loss of £5,605 being shown on the New South Wales section and a profit of £9,778 on the Queensland section. In addition, the following amounts were paid as interest:—New South Wales £72,170, and Queensland £27,020, the remainder, £118,917, being borne by the Commonwealth. Figures relating to the operation, etc., of the line are incorporated as far as possible with those for New South Wales and Queensland in the tables in Section 3, State Railways.

5. **Mileage Open for Traffic, all Lines.**—(i) *General.* In all the States the principle that the control, construction and maintenance of the railways should be in the hands of the Government has long been adhered to, excepting in cases presenting unusual circumstances. In various parts of Australia lines have been constructed and managed by private companies, but at the present time nearly the whole of the railway traffic is in the hands of the State or Commonwealth Governments. A large proportion of the private lines has been laid down for the purpose of opening up forest lands, mining districts, or sugar areas, and these lines are not generally used for the conveyance of passengers or the public conveyance of goods.

The subjoined table shows the route mileage of Federal, State and private lines open for general traffic (exclusive of sidings and cross-overs) in each State for each of the years 1931-32 to 1935-36. The railway mileage given for each State includes both Federal, State and private railways in that State.

RAILWAYS.—GOVERNMENT AND PRIVATE.—MILEAGE OPEN.

State or Territory.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Miles.	Miles.	Miles.	Miles.	Miles.
New South Wales ..	6,208.30	6,246.61	6,246.53	6,246.53	6,204.64
Victoria ..	4,745.71	4,745.71	4,745.71	4,745.71	4,745.71
Queensland ..	6,823.31	6,836.41	6,836.55	6,836.54	6,812.80
South Australia ..	3,775.81	3,775.81	3,775.81	3,775.90	3,775.90
Western Australia ..	4,966.06	5,068.72	5,090.87	5,089.50	5,089.33
Tasmania ..	786.45	786.45	786.45	776.46	776.46
Federal Capital Territory ..	4.94	4.94	4.94	4.94	4.94
Northern Territory ..	489.73	489.73	489.73	489.73	489.73
Australia ..	27,800.31	27,954.38	27,976.59	27,965.31	27,899.51

In previous issues of the Year Book particulars of mileage open were given for different periods from 1855 onwards. (See No. 15, p. 537.)

(ii) *Government and Private Lines Separately.* The next table shows for each State (a) the length of lines owned by the State Government, and by the Commonwealth Government in that State, all of which lines are open for general use by the public, and (b) the length of private lines available for general use by the public. The mileages specified in the case of Government and private lines are to the 30th June, 1936:—

RAILWAYS.—GOVERNMENT AND PRIVATE.—MILEAGE CLASSIFIED, 1935-36.

State or Territory.	Government Lines—		Private Lines available for General Traffic.	Total Open for General Traffic.
	State.	Federal.		
	Miles.	Miles.	Miles.	Miles.
New South Wales ..	6,124.19	..	80.45	6,204.64
Victoria ..	4,720.77	..	24.94	4,745.71
Queensland ..	6,566.65	..	246.15	6,812.80
South Australia ..	2,529.35	1,196.04	50.51	3,775.90
Western Australia ..	4,358.34	453.99	277.00	5,089.33
Tasmania ..	644.89	..	131.57	776.46
Federal Capital Territory ..	..	4.94	..	4.94
Northern Territory ..	..	489.73	..	489.73
Australia ..	24,944.19	2,144.70	810.62	27,899.51

6. *Comparative Railway Facilities.*—The mileage of line open to the public for general traffic (including both Government and private lines) is shown in the subjoined statement in relation to population and area respectively at the 30th June, 1930:—

RAILWAYS.—GOVERNMENT AND PRIVATE.—COMPARISON OF FACILITIES, 1935-1936.

Particulars.	N.S.W.	Vic.	Q'd.	S.A.	W.A.	Tas.	Fed. Cap. Ter.	Nor. Ter.	Aust.
Mileage of Railway—									
Per 1,000 of population ..	2.33	2.57	6.95	6.43	11.30	3.38	0.51	92.18	4.12
Per 1,000 sq. miles of Territory ..	20.05	54.00	10.16	9.93	5.21	29.62	5.26	0.94	9.38

7. Classification of Lines according to Gauge, 1935-36.—The next table gives a classification, according to gauge, of the total mileage, exclusive of sidings and crossovers, of (i) Federal railways, given in the State or Territory in which situated; (ii) State railways; and (iii) Private railways open to the public for general traffic. Particulars of Government railways are up to the 30th June, 1936, and of private railways open for general traffic to the 31st December, 1936, as nearly as possible.

RAILWAYS.—GOVERNMENT AND PRIVATE.—GAUGES, 1935-36.

State or Territory in which situated.	Route mileage having a gauge of						Total.
	5 ft. 3 in.	4 ft. 8½ in.	3 ft. 6 in.	3 ft. 0 in.	2 ft. 6 in.	2 ft. 0 in.	
FEDERAL RAILWAYS.							
South Australia	Miles. 597.86	Miles. 598.18	Miles. ..	Miles. ..	Miles. ..	Miles. 1,196.04
Western Australia 453.99	.. ..	.. ..	.. ..	.. ..	.. 453.99
Federal Capital Territory 4.94	.. ..	.. ..	.. ..	.. ..	.. 4.94
Northern Territory	489.73	..	..	..	489.73
Total	1,056.79	1,087.91	..	..	..	2,144.70

STATE RAILWAYS.							
New South Wales ..	..	6,124.19	..	..	..	..	6,124.19
Victoria ..	..	4,599.00	..	..	121.77	..	4,720.77
Queensland ..	..	.. 68.82	6,467.57	..	..	30.26	6,566.65
South Australia ..	..	1,451.24	1,078.11	..	..	..	2,529.35
Western Australia ..	..	..	4,358.34	..	..	..	4,358.34
Tasmania ..	..	..	633.56	..	..	11.33	644.89
Total ..	..	6,050.24	6,193.01	12,537.58	..	121.77	24,944.19

PRIVATE RAILWAYS OPEN FOR GENERAL TRAFFIC.

New South Wales ..	..	.. 43.72	36.73	..	..	..	80.45
Victoria ..	..	13.94	..	11.00	..	..	24.94
Queensland ..	..	..	99.50	..	..	146.65	246.15
South Australia ..	..	..	50.51	..	..	..	50.51
Western Australia ..	..	..	277.00	..	..	..	277.00
Tasmania ..	..	..	125.07	..	..	6.50	131.57
Total ..	..	13.94	43.72	588.81	11.00	153.15	810.62

ALL RAILWAYS OPEN FOR GENERAL TRAFFIC.

New South Wales ..	..	6,167.91	36.73	..	..	..	6,204.64
Victoria ..	..	4,612.94	..	11.00	121.77	..	4,745.71
Queensland ..	..	.. 68.82	6,567.07	..	..	176.91	6,812.80
South Australia ..	..	1,451.24	597.86	1,726.80	..	..	3,775.90
Western Australia ..	..	.. 453.99	4,635.34	..	..	..	5,089.33
Tasmania ..	..	..	758.63	..	..	17.83	776.46
Federal Capital Territory ..	..	.. 4.94	..	..	..	..	4.94
Northern Territory ..	..	..	489.73	..	..	..	489.73
GRAND TOTAL ..	..	6,064.18	7,293.52	14,214.30	11.00	121.77	27,899.51

8. **Summary of Operations, 1935-36.**—In the following table a summary is given of the working of all railways open for general traffic in Australia during the year ended 30th June, 1936 :—

RAILWAYS.—FEDERAL, STATE AND PRIVATE.—SUMMARY, 1935-36.

Particulars.	Federal Railways.	State Railways.	Private Railways.	Total for Australia.
Mileage open (route) 30th June, 1936 Miles	2,144.70	24,944.19	310.62	27,899.51
Capital cost (e) £	15,899,638	322,041,276	(a) 5,033,916	342,974,830
Cost per mile £	7.413	12.910	6.210	12.293
Gross revenue £	387,709	40,913,840	(b) 688,834	41,990,383
Gross revenue per train mile d.	159.86	140.89	132.65	140.90
Working Expenses (e) £	387,457	29,380,414	(b) 406,496	30,174,367
Working Expenses per train mile d.	159.76	101.17	78.28	101.25
Net Revenue £	252	11,533,426	(b) 282,338	11,816,016
Net Revenue per train mile d.	0.10	39.72	54.37	39.65
Train miles run Miles	582,073	69,693,767	1,246,278	71,522,118
Passengers carried No.	96,502	368,099,743	1,288,881	369,485,120
Tons of goods, etc., carried Tons	101,379	31,017,873	3,646,657	34,795,909
Average number of employees No.	(d) 1,417	(d) 98,731	(b) (c) 1,108	101,256
Average wage £	209	230	226	230

(a) Exclusive of the capital cost of 158.93 miles of private lines for which information is not available.
 (b) Incomplete. (c) Employees at 31st December, 1936. (d) Exclusive of Construction Branch.
 (e) See § 1., paragraph 2, page 121.

9. **Track Mileage—Government Railways.**—The following table gives the track mileages of all Government railways and sidings, exclusive of Tasmania, for the years ended 30th June, 1933 to 1936, classified according to gauge, together with the percentages on the total :—

RAILWAYS, FEDERAL AND STATE.—TRACK MILEAGE.(a)

At 30th June—									
Gauge.	1933.		1934.		1935.		1936.		
	Miles.	%	Miles.	%	Miles.	%	Miles.	%	
5 ft. 3 in. ..	7,859.71	24.70	7,855.07	24.65	7,825.11	24.56	7,825.79	24.58	
4 ft. 8½ in. ..	9,317.75	29.28	9,324.67	29.26	9,331.02	29.29	9,336.67	29.33	
3 ft. 6 in. ..	14,478.76	45.50	14,528.97	45.58	14,543.16	45.64	14,507.74	45.57	
2 ft. 6 in. ..	131.87	0.42	131.91	0.41	131.91	0.41	131.88	0.42	
2 ft. 0 in. ..	33.00	0.10	33.00	0.10	33.00	0.10	33.00	0.10	
Total ..	31,821.09	100.00	31,873.62	100.00	31,864.20	100.00	31,835.08	100.00	

(a) Exclusive of Tasmania, particulars of which are not available.

§ 2. Federal Railways.

1. **General.**—On the 1st January, 1911, the Commonwealth Government took over the Northern Territory from the South Australian Government, and at the same time the railways from Darwin to Pine Creek in the Northern Territory, and from Port Augusta to Oodnadatta in South Australia, came under its control. Subsequently the construction of a transcontinental line from Port Augusta in South Australia to Kalgoorlie in Western Australia was undertaken by the Commonwealth Government, while a line has been built in the Federal Capital Territory, connecting Canberra with the New South Wales railway system at Queanbeyan. An extension of the transcontinental line

from Port Augusta to Port Pirie was completed in July, 1937. The North Australia Railway has, since its acquisition by the Commonwealth, been extended twice, first to Emungalan and then to Birdum. The Central Australia Railway has also been extended from Oodnadatta to Alice Springs. In 1917 the Commonwealth Railways Act was passed by which all the Federal railways were vested in the Commonwealth Railways Commissioner.

2. *Northern Territory Railways.*—(i) *North Australia Railway (Darwin to Birdum).*—Provision was made in the Northern Territory Acceptance Act of 1910 for the construction of a line to and from South Australia. The first step was the extension of the existing line—Darwin to Pine Creek—as far as Katherine River, which was completed in 1917. After enquiry the Parliamentary Standing Committee on Public Works recommended a further extension to Daly Waters to form portion of an eventual line through Newcastle Waters to Camooweal in Queensland. The construction of the line from Katherine River to Daly Waters, a distance of 160 miles, was commenced by day labour in 1927. A section as far as Mataranka was opened for public traffic on 1st July, 1928, but owing to the curtailment of loan moneys the line was not taken beyond Birdum, 316 miles from Darwin, although construction had been commenced on the Birdum to Daly Waters section. The Mataranka to Birdum section was opened on 4th September, 1929.

(ii) *Central Australia Railway (Port Augusta to Alice Springs).*—The extension of the southern portion of the North-South line was authorized by the Railways (South Australia) Agreement Act 1926, which ratified the agreement between the Commonwealth and South Australian Governments for the construction of a 3 ft. 6 in. gauge line from Oodnadatta to Alice Springs. The estimated cost, exclusive of rolling stock, of the proposed extension, which comprises 293 miles, was £1,700,000. The first section 21½ miles from Oodnadatta was completed on the 29th August, 1927. The section from Oodnadatta to Rumbalara (160 miles 67 chains) was opened for public traffic on the 23rd December, 1928, and the remaining portion from Rumbalara to Alice Springs was completed and opened for public traffic on the 2nd August, 1929.

3. *Federal Capital Territory Railway (Queanbeyan to Canberra).*—This line was built by the Railway Construction Branch of the Public Works Department, New South Wales, and, when completed, was taken over by the Chief Commissioner of Railways for that State, who worked the line for the Commonwealth Government until 1st July, 1928, on which date the management was taken over by the Commonwealth Railways Commissioner. The line was opened for traffic on 25th May, 1914. It connects with the New South Wales railway system at Queanbeyan, and is 4.94 miles in length.

4. *Trans-Australian Railway (Kalgoorlie to Port Augusta).*—A preliminary survey of a railway line connecting Western Australia with the Eastern States was commenced in 1908 and completed in March, 1909. The estimated cost of construction and equipment of the line on the basis of a 4 ft. 8½ in. gauge from Port Augusta in South Australia to Kalgoorlie in the Western Australian goldfields—a distance of 1,063 miles—was £4,045,000. The construction of the line was commenced at Port Augusta in September, 1912, and operations began at the other end from Kalgoorlie in February, 1913. The line was completed on 17th October, 1917, and five days later the first through train left Port Augusta with an official party on board for Kalgoorlie. Owing to deviations from the original route the length of the line was reduced from 1,063.39 miles to 1,051.85 miles—a saving of 11.54 miles. More detailed reference to the construction of the line and a description of the country through which it passes is given in Official Year Book No. 11, pp. 662 and 1213.

On the 29th November, 1935, the Commonwealth and the State of South Australia entered into an agreement to extend the Trans-Australian line by the construction of a 4 ft. 8½ in. gauge railway from Port Augusta to Solomontown, a suburb of Port Pirie, in the State of South Australia, the work to be undertaken by the Commonwealth at a maximum cost of £625,000 inclusive of rolling stock. The State of South Australia agreed to construct a railway of 5 ft. 3 in. gauge from Red Hill to Port Pirie to meet the Commonwealth line at Solomontown.

These lines, which have been completed and were opened for traffic on 26th July, 1937, will reduce the distance and travelling time between Port Augusta and Adelaide and eliminate one break of gauge.

5. **Lines Open, Under Construction and Surveyed.**—The following table shows the lines open for traffic under the control of the Commonwealth Government at 30th June, 1936, together with the lines under construction and those which have been surveyed only :—

RAILWAYS, FEDERAL, 30th JUNE, 1936.

Terminals.	Miles.
OPEN FOR TRAFFIC.	
Trans-Australian Railway—Port Augusta (South Australia) to Kalgoorlie (Western Australia)	1,051.85
Central Australia Railway—Port Augusta (South Australia) to Alice Springs (Central Australia)	771.41
Federal Territory Railway—Queanbeyan (New South Wales) to Canberra (Federal Capital Territory)	4.94
North Australia Railway—Darwin to Birdum (Northern Territory)	316.50
Total opened for traffic	2,144.70
UNDER CONSTRUCTION.	
Trans-Australian Railway—Port Augusta to Port Pirie (South Australia) ..	56.25
North Australia Railway—Birdum to Daly Waters (Northern Territory) (a) ..	43.50
Total under construction	99.75
(a) Construction suspended in September, 1929.	
SURVEYED.	
Kingoonya to Boorthanna (South Australia)	176.44
Canberra to Jervis Bay (Federal Capital Territory)	140.22
Canberra (Federal Capital Territory) to Federal Capital Territory Border in the direction of Yass (New South Wales)	11.67
Daly Waters (Northern Territory) to Alice Springs (South Australia) ..	559.50
Port Augusta to Crystal Brook (South Australia)	69.25
Total surveyed	957.08

In addition, the following trial surveys were undertaken on behalf of the North Australia Commission, viz. :—

(1) From the proposed deep water port at Rocky Island (Gulf of Carpentaria) to Borroloola; (2) from Borroloola to near Anthony's Lagoon; (3) from Daly Waters to a point on the Queensland Border about 44 miles south of Camooweal; and (4) from a point on the Daly Waters—Queensland Border survey 45 miles south of Daly Waters and near Newcastle Waters to the border of Western Australia.

6. **Mileage open, worked, and Train miles run.**—The next table shows the length of the Federal railways open for traffic, average miles worked, and the train miles run in the years 1932 to 1936 :—

RAILWAYS, FEDERAL.—MILEAGE OPEN, WORKED, AND TRAIN MILES.

Year ended 30th June—	Railway.				Total.
	Trans- Australian.	Central Australia.	Federal Capital Territory.	North Australia.	
MILES OPEN FOR TRAFFIC.					
	Miles.	Miles.	Miles.	Miles.	Miles.
1932	1,052	77½	5	317	2,145
1933	1,052	77½	5	317	2,145
1934	1,052	77½	5	317	2,145
1935	1,052	77½	5	317	2,145
1936	1,052	77½	5	317	2,145

AVERAGE MILES WORKED.

	Miles.	Miles.	Miles.	Miles.	Miles.
1932	1,052	77½	5	317	2,145
1933	1,052	77½	5	317	2,145
1934	1,052	77½	5	317	2,145
1935	1,052	77½	5	317	2,145
1936	1,052	77½	5	317	2,145

TRAIN MILES RUN.(a)

1932	319,747	154,529	6,865	35,819	516,960
1933	324,173	182,414	6,850	33,809	547,246
1934	328,477	178,916	6,885	36,340	550,618
1935	335,198	158,356	6,885	35,677	536,116
1936	334,601	209,266	6,895	31,311	582,073

(a) Traffic Train Mileage (exclusive of "Assistant" and "Light" mileages).

7. Cost of Construction and Equipment.—In the following table particulars are given of the cost of construction and equipment of the undermentioned railways for each of the years 1932 to 1936 :—

RAILWAYS, FEDERAL.—CAPITAL COST.

	Railway.				Total.
Year ended 30th June—	Trans-Australian.	Central Australia.	Federal Capital Territory.(a)	North Australia.	
TOTAL COST OF CONSTRUCTION AND EQUIPMENT OF LINES OPEN.					
	£	£	£	£	£
1932	7,879,397	4,769,938	84,429	2,755,700	15,489,464
1933	7,928,876	4,773,301	84,429	2,758,139	15,544,745
1934	7,987,216	4,777,278	84,493	2,758,139	15,607,126
1935	8,045,841	4,782,077	84,592	2,759,772	15,672,282
1936 (b) ..	8,251,150	4,787,882	85,325	2,775,281	15,899,638

COST PER MILE OPEN.

1932	7,490	6,187	17,091	8,693	7,221
1933	7,538	6,188	17,091	8,714	7,248
1934	7,593	6,193	17,104	8,714	7,277
1935	7,649	6,199	17,124	8,720	7,307
1936	7,884	6,207	17,272	8,769	7,413

(a) Exclusive of Rolling Stock the property of New South Wales Government Railways.
 § 1 paragraph 2, p. 121.

(b) See

The sum of £1,837,380, of which £113,820 was for surveys, etc., has been provided from revenue for capital purposes to 30th June, 1936.

8. **Gross Revenue.**—(i) *Total, per average mile worked, and per train mile run.* The following table shows the total revenue from all sources, the revenue per average mile worked, and the revenue per train mile run for each of the undermentioned railways for the financial years 1932 to 1936 inclusive :—

RAILWAYS, FEDERAL.—GROSS REVENUE, TOTAL, ETC.

Year ended 30th June—	Railway.				Total.
	Trans- Australian.	Central Australia.	Federal Capital Territory.	North Australia.	
TOTAL GROSS REVENUE.					
	£	£	£	£	£
1932	173,402	79,400	3,810	23,495	280,107
1933	188,168	93,359	4,313	22,612	308,452
1934	206,205	90,566	5,277	27,907	329,955
1935	217,758	83,522	6,132	38,273	345,685
1936	246,653	100,981	6,413	33,662	387,709
GROSS REVENUE PER AVERAGE MILE WORKED.					
	£	£	£	£	£
1932	165	103	771	74	131
1933	179	121	873	71	144
1934	196	117	1,068	88	154
1935	207	108	1,241	121	161
1936	234	131	1,298	106	181
GROSS REVENUE PER TRAIN-MILE RUN.					
	d.	d.	d.	d.	d.
1932	130.15	123.32	133.20	157.42	130.04
1933	139.31	122.83	151.11	160.51	135.27
1934	150.66	121.49	183.95	184.31	143.82
1935	155.91	126.58	213.75	257.46	154.75
1936	176.92	115.81	223.22	258.02	159.86

(ii) *Classification and Percentages.* During the year 1935–36 receipts from coaching traffic and goods and live stock represented 49 per cent. and 31 per cent. respectively of the total gross revenue of the Trans-Australian line, similar percentages for the remaining lines being :—Central Australia line 15 per cent. and 81 per cent., Federal Capital Territory line 45 per cent. and 52 per cent., and North Australia line 9 per cent. and 32 per cent. coaching and goods and live stock revenue respectively.

The miscellaneous receipts for the year 1935–36 include an amount of £20,355, revenue from dining cars and refreshment services on the Trans-Australian and Central Australia Railways. A sum of £20,251 was received from this source during the previous year.

Owing chiefly to improvements in goods and live stock traffic, revenue in respect of all except the North Australia Railway showed increases as compared with the previous year. The decrease in the revenue of the latter was chiefly due to a falling off in mining activities and to a reduction in freight rates. There has been a steady increase in the revenues of the Trans-Australian and Federal Capital Territory Railways over the past five years.

9. **Working Expenses.**—(i) *Total.* The following table shows the total working expenses, and the percentages on the corresponding gross revenues of each railway for each year from 1932 to 1936.

Details of the annual expenditure on (a) maintenance of ways, works and buildings; (b) locomotive, carriage and wagon repairs and renewals; (c) traffic expenses; and (d) compensation, general and miscellaneous charges, are given in (iii) following.

RAILWAYS, FEDERAL.—WORKING EXPENSES, TOTAL, ETC.

Year ended 30th June—	Railway.				Total.
	Trans- Australian.	Central Australia.	Federal Capital Territory.	North Australia.	
TOTAL WORKING EXPENSES.					
	£	£	£	£	£
1932	197,147	111,555	5,012	44,088	357,802
1933	197,363	106,875	4,720	38,843	347,801
1934	218,506	113,050	4,919	39,693	376,168
1935	197,871	133,896	5,917	41,984	379,668
1936	201,421	138,419	5,983	41,534	387,457

PERCENTAGE OF WORKING EXPENSES ON REVENUE.

	%	%	%	%	%
1932	113.69	140.49	131.55	187.65	127.74
1933	104.90	114.48	109.43	171.79	112.76
1934	105.97	124.83	93.22	142.23	114.01
1935	90.87	160.31	96.49	109.70	109.83
1936	81.66	137.07	93.29	123.68	99.94

Compared with results for the previous year, the percentage of working expenses on revenue shows decreases in respect of all systems, except the North Australia Railway, and even with the latter the actual expenses were lower than during the previous year.

(ii) *Averages.* The next table gives the working expenses per average mile worked and per train-mile run for each railway for the years 1932 to 1936 :—

RAILWAYS, FEDERAL.—WORKING EXPENSES, AVERAGES.

Year ended 30th June—	Railway.				Total.
	Trans- Australian.	Central Australia.	Federal Capital Territory.	North Australia.	
WORKING EXPENSES PER AVERAGE MILE WORKED.					
	£	£	£	£	£
1932	187	145	1,015	139	167
1933	188	139	956	123	162
1934	208	147	996	125	175
1935	188	173	1,198	133	177
1936	191	179	1,211	132	181

WORKING EXPENSES PER TRAIN-MILE RUN.

	d.	d.	d.	d.	d.
1932	147.98	173.26	175.21	295.40	166.11
1933	146.11	140.61	165.37	275.73	152.53
1934	159.65	151.65	171.47	262.14	163.96
1935	141.67	202.93	206.26	282.42	169.96
1936	144.47	158.75	208.26	319.13	159.76

(iii) *Classification and Percentages.* Of the total working expenses of the Federal Railways during the year 1935-36, maintenance expenses represented 38 per cent., locomotive, carriage and wagon charges 38 per cent., and traffic expenses 15 per cent. Details for each line were as follows:—Trans-Australian line 27 per cent., 46 per cent. and 15 per cent.; Central Australia line 53 per cent., 31 per cent., and 11 per cent.; Federal Capital Territory line 31 per cent., 28 per cent. and 35 per cent.; and North Australia line 39 per cent., 26 per cent. and 28 per cent. respectively.

10. *Passenger Journeys, and Tonnage of Goods and Live Stock.*—(i) *General.* In the next table particulars are given of the passenger journeys and tonnage of goods and live stock carried on the Federal railways during the years 1932 to 1936:—

RAILWAYS, FEDERAL.—TRAFFIC.

Year ended 30th June—	Railway.				Total.
	Trans- Australian.	Central Australia.	Federal Capital Territory.	North Australia.	
PASSENGER JOURNEYS.					
	No.	No.	No.	No.	No.
1932	15,875	25,683	29,417	3,101	74,076
1933	19,642	28,380	30,533	2,784	81,339
1934	19,218	28,493	37,335	3,178	88,224
1935	22,530	32,768	38,963	3,697	97,958
1936	22,843	31,669	39,023	2,967	96,502

TONNAGE OF GOODS AND LIVE STOCK CARRIED.

	Tons.	Tons.	Tons.	Tons.	Tons.
1932	21,316	65,538	7,807	3,039	97,700
1933	19,754	71,710	10,502	3,435	105,401
1934	21,598	47,100	15,930	3,688	88,316
1935	19,073	43,668	18,008	6,459	87,208
1936	30,757	45,475	20,141	5,006	101,397

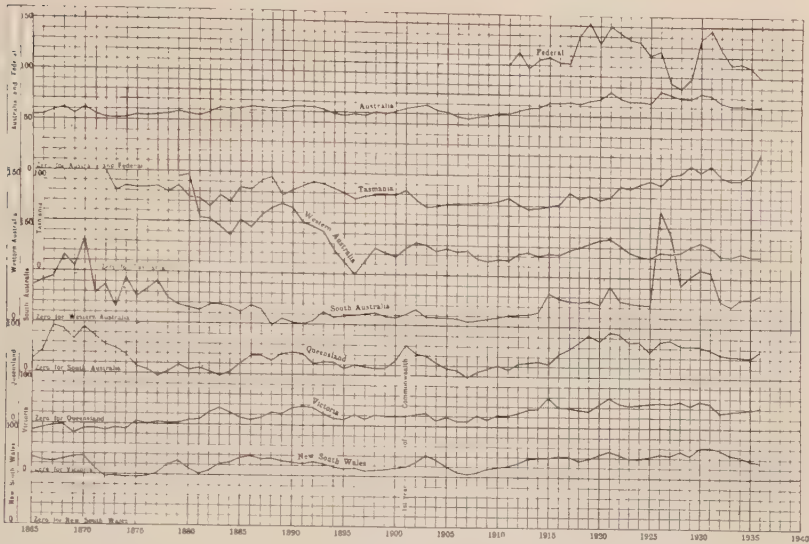
(ii) *Passenger-Mileage Summary.* The appended table gives particulars of "Passenger-Mileage" on each of the Federal railways for the year 1935-36:—

RAILWAYS, FEDERAL.—"PASSENGER-MILES" SUMMARY, 1935-36.

Railway.	Passenger Train Mileage.	Number of Passenger Journeys.	Total "Passenger-Miles."	Amount Received from Passengers.	Average Number of Passengers carried per Train Mile.	Average Mileage per Passenger Journey.	Average Earnings per "Passenger-Mile."	Average Fare per Passenger Journey.	Density of Traffic per Average Mile Worked.
			,000 omitted.	£		Miles.	d.	£ s. d.	
Trans-Australian ..	229,724	22,843	20,356	89,782	89	801	1.06	3 18 7	1,353
Central Australia ..	22,011	31,069	2,077	10,942	92	60	1.20	0 0 11	2,693
Federal Capital Territory ..	5,444	39,023	193	1,529	35	5	1.90	0 0 9	39,085
North Australia ..	8,747	2,967	326	2,524	37	110	1.86	0 17 0	1,030

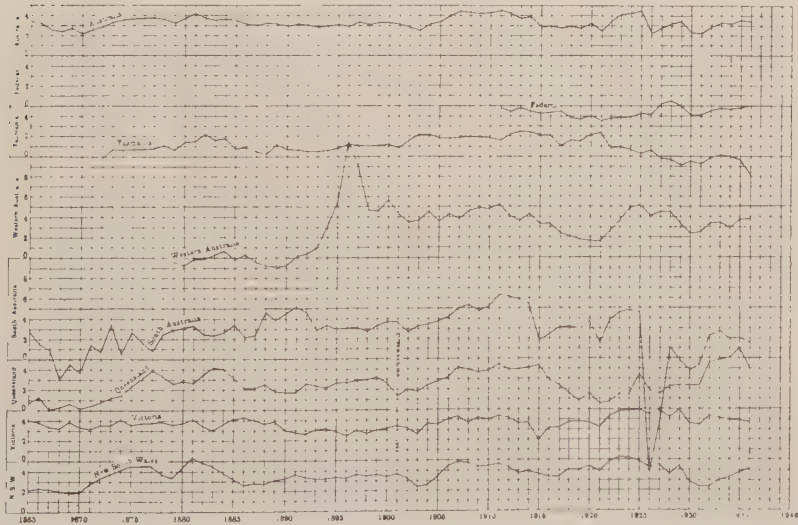
(iii) *Ton-Mileage Summary.* Particulars of ton-mileage are shown hereunder in respect of each of the Federal railways for the year 1935-36:—

PERCENTAGES OF WORKING EXPENSES ON GROSS REVENUE OF GOVERNMENT
RAILWAYS, 1865 TO 1936.



EXPLANATION.—The base of each small square represents throughout one year. The vertical side of a small square denotes throughout 10 per cent., the heavy zero lines being different for each State and Australia, with, however, the exceptions that the zero lines for Australia and Federal are identical.

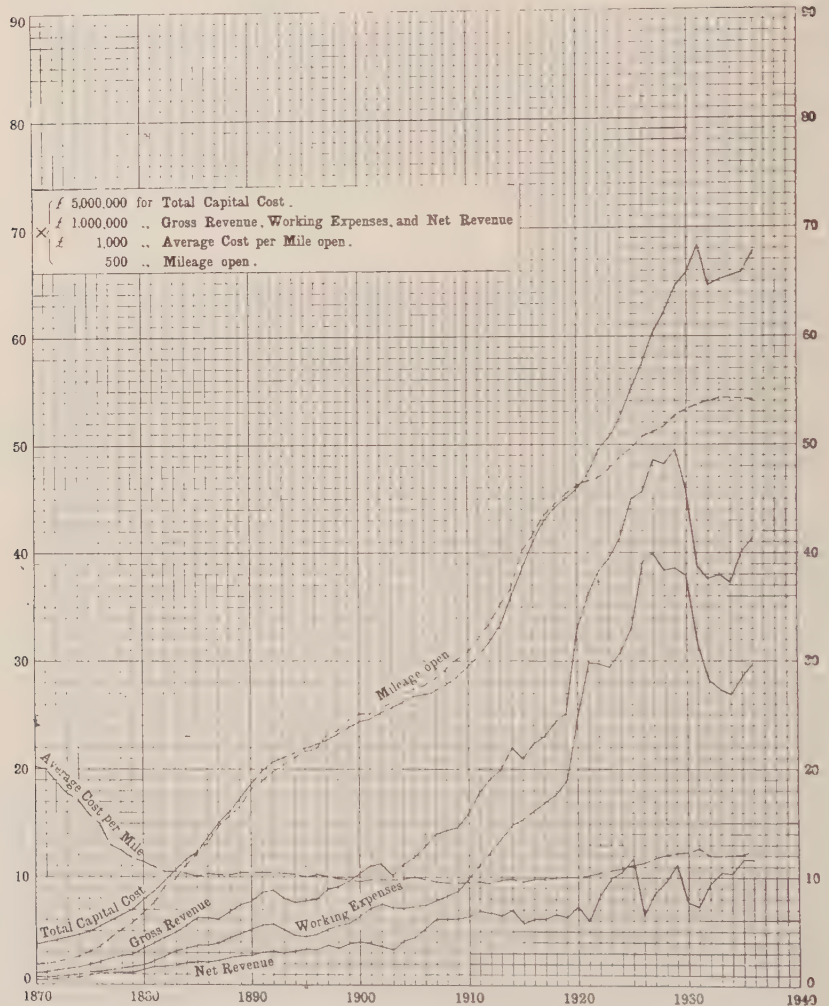
PERCENTAGES OF NET REVENUE ON CAPITAL COST OF GOVERNMENT
RAILWAYS, 1865 TO 1936.



EXPLANATION.—The base of each small square represents throughout one year. The vertical side of a small square denotes 1 per cent., the thick zero lines, however, for each State and Australia being different.

Where the curve for any State falls below that State's zero line, loss is indicated, the working expenses having exceeded the gross revenue.

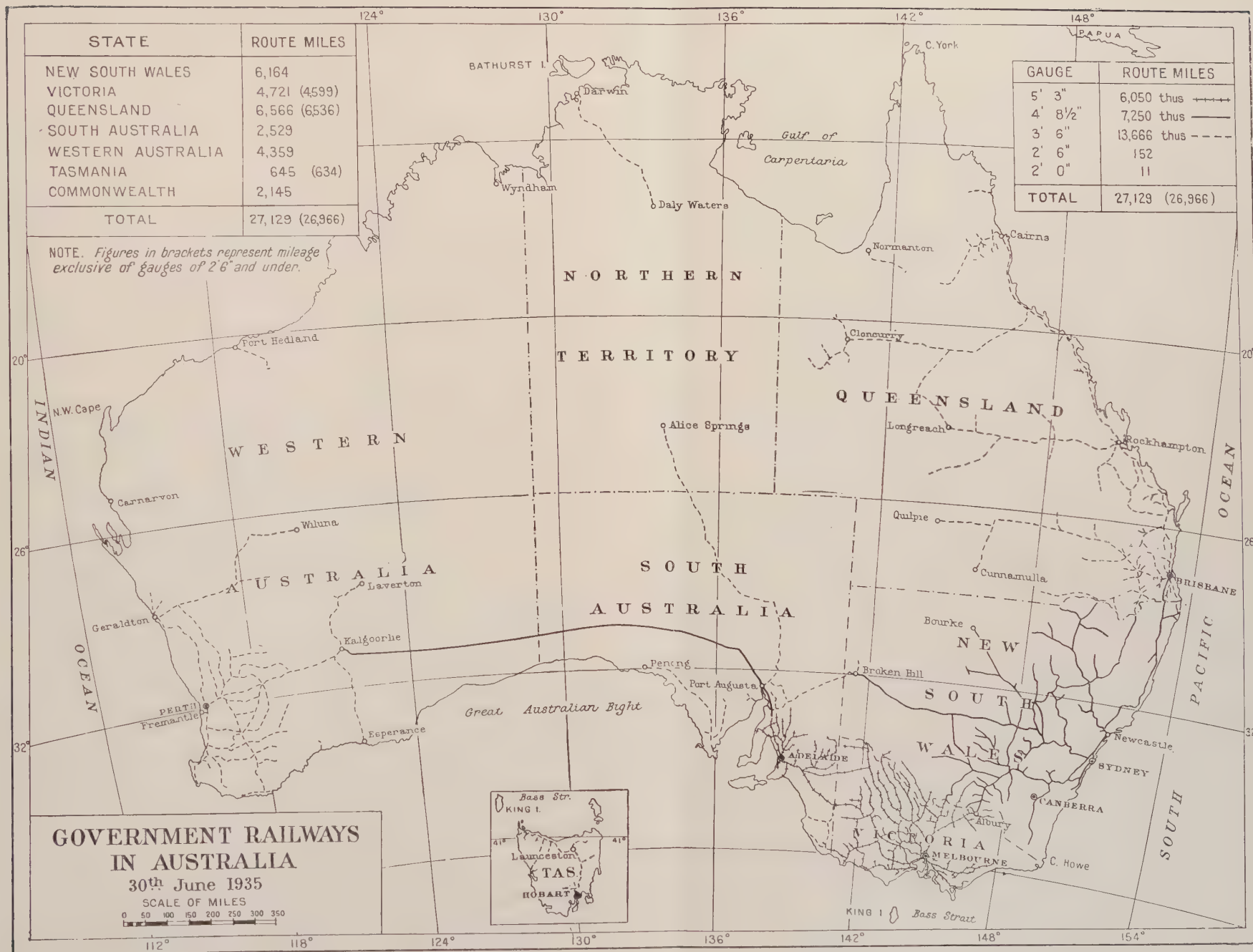
FINANCIAL POSITION OF THE GOVERNMENT RAILWAYS OF AUSTRALIA, 1870 TO 1936.

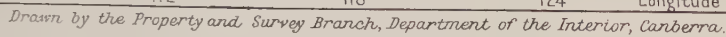


EXPLANATION.—The base of each small square represents throughout one year. The significance of the vertical height of each square varies according to the nature of the several curves.

In the curve for the total capital cost, the vertical side of each square represents £5,000,000.

In the curves for (i) gross revenue; (ii) working expenses; and (iii) net revenue, the vertical side of each small square represents £1,000,000. For the curve of average cost per mile open, the vertical side of each small square represents £1,000. The mileage open is shown by a dotted curve, the vertical side of each small square representing 500 miles.





RAILWAYS, FEDERAL.—"TON-MILEAGE" SUMMARY, 1935-36.

Railway.	Goods Train Mileage.	Total Tons Carried.	Total "Ton-Miles."	Goods Earnings.	Average Freight-paying Load, per Train.	Average Haul per ton.	Earnings per "Ton-Mile."	Density of Traffic per Average Mile Worked.
			'000 omitted.	£	Tons.	Miles.	d.	
Trans-Australian ..	104,877	30,757	12,912	77,305	123.12	420	1.44	12,276
Central Australia ..	186,655	45,475	11,158	81,381	50.78	245	1.75	14,464
Federal Capital Territory ..	1,451	20,141	101	3,309	69.40	5	7.89	20,386
North Australia ..	22,564	5,006	550	10,796	24.37	110	4.71	1,738

11. Rolling Stock.—The following table shows the numbers of rolling stock in use during the years 1932 to 1936. Further details may be found on page 21 of Transport and Communication Bulletin No. 27.

RAILWAYS, FEDERAL.—ROLLING STOCK.

At 30th June—

Railway.	1932.			1933.			1934.			1935.			1936.		
	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.
Trans-Australian ..	68	54	728	68	54	728	68	54	728	68	54	728	68	54	728
Central Australia ..	24	20	313	24	19	313	24	19	313	24	19	313	24	20	312
North Australia ..	13	13	314	13	14	314	13	14	314	13	14	314	13	14	314
Total ..	105	87	1,355	105	87	1,355	105	87	1,355	105	87	1,355	105	88	1,354

New South Wales Government Railway stock is used on the Federal Capital Territory line.

12. Employees.—(i) General. The following table shows the number of employees on the Federal railways at 30th June in each year from 1932 to 1936 inclusive, classified according to salaried and wages staffs:—

RAILWAYS, FEDERAL.—EMPLOYEES.

At 30th June—

Railway.	1932.		1933.		1934.		1935.		1936.	
	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.
Trans-Australian	No. 102	(a) 556	No. 99	(a) 718	No. 99	(a) 696	No. 101	(a) 1,017	No. 107	(a) 860
Central Australia	55	275	53	(b) 297	53	(b) 311	49	385	48	305
Federal Capital Territory ..	4	5	4	5	4	7	4	7	4	8
North Australia ..	14	82	15	88	15	95	13	109	12	101
Total ..	175	918	171	1,108	171	1,109	167	1,518	171	1,343

(a) Includes those engaged on construction work, 1932, 15; 1933, 157; 1934, 91; 1935, 63; and 1936, 104. (b) Includes 6 on construction work in 1934 and 1 in 1935. (c) Includes 13 on construction work.

(ii) *Average Employed throughout Year.* The average number of employees throughout the year 1935-36 was 171 salaried staff and 1,320 wages staff (of whom five of the former and 69 of the latter were on construction work).

13. *Accidents.*—The following table shows the number of persons killed and injured in accidents in each of the years 1932 to 1936:—

RAILWAYS, FEDERAL.—ACCIDENTS.

Railway.	Year ended 30th June—									
	1932.		1933.		1934.		1935.		1936.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Trans-Australian	3	..	2	1	4	1	5	..	14
Central Australia	1	..	4	..	8	..	5	..	7
Federal Capital Territory	1	..	..	..	1	..	..	..	..
North Australia	1	..	..	..	..	1	6	..	2
Total	6	..	6	1	13	2	16	..	23

Further details are available on page 24 of Transport and Communication Bulletin No. 27.

§ 3. State Railways.

1. *Administration and Control of State Railways.*—The policy of Government control of the railways has been adopted in each State, and earlier issues of the Year Book (see No. 6, p. 693) contain a description of the methods adopted by the various State Governments in the control and management of their railways.

2. *Mileage Open, 1932 to 1936.*—The following table shows the length of State railways open for traffic on the 30th June in the years 1932 to 1936:—

RAILWAYS, STATE.—MILEAGE OPEN FOR TRAFFIC.

Year ended 30th June—				N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
				Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1932 ..	..	..	..	6,126	4,721	6,558	2,529	4,235	645	24,814
1933 ..	..	..	..	6,164	4,721	6,566	2,529	4,338	645	24,963
1934 ..	..	..	..	6,164	4,721	6,566	2,529	4,360	645	24,985
1935 ..	..	..	..	6,164	4,721	6,566	2,529	4,359	645	24,084
1936 ..	..	..	..	6,124	4,721	6,567	2,529	4,358	645	24,944

A graph indicating the mileage open in Australia at the end of each of the years 1870 to 1936 accompanies this chapter.

The appended statement shows the actual mileage opened or closed for traffic in the year 1936, also the annual average increase or decrease in mileage opened since 1926 in each State:—

RAILWAYS, STATE.—MILEAGE OPENED OR CLOSED ANNUALLY.

Mileage.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
Mileage opened or closed during 1935-36 (a) ..	-39.64	..	..	..	-0.17	..	-39.81
Average annual mileage increase or decrease for 10 years to 30th June, 1936 (a) ..	38.24	9.35	32.66	3.02	49.40	-2.80	129.87

(a) Minus sign (—) denotes mileage closed.

No new mileage was opened for traffic during 1935-36. The dismantling of the Tarrawingee Tramway in New South Wales and minor adjustments to lines in that State and in Western Australia were responsible for the decreases shown in the above table.

3. Length and Gauge of Railway Systems in each State.—In all the States the Government railways are grouped, for the convenience of administration and management, into several divisions or systems. A summary showing concisely the gauge and length of the main and branch lines included in each division or system in the different States for the year ended 30th June, 1936, is given in the Transport and Communication Bulletin No. 27 issued by this Bureau.

4. Average Mileage Worked and Train-Miles Run.—The total mileage open for traffic at the end of each financial year has been given previously, but, in considering the returns relating to revenue and expenditure and other matters, it is desirable to know the average number of miles actually worked during each year. The next table shows the average number of miles worked and the total number of train-miles run by the Government railways of each State during the years 1932 to 1936 inclusive :—

RAILWAYS, STATE.—MILEAGE WORKED AND TRAIN-MILES RUN.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
AVERAGE MILEAGE WORKED.							
1932 ..	6,050	4,720	6,550	2,529	4,214	645	24,708
1933 ..	6,159	4,721	6,565	2,529	4,278	645	24,897
1934 ..	6,164	4,721	6,567	2,529	4,351	645	24,977
1935 ..	6,164	4,721	6,567	2,529	4,359	645	24,985
1936 ..	6,124	4,721	6,567	2,529	4,358	645	24,944

TRAIN-MILES RUN.(a)

1932 ..	25,848,580	15,363,776	10,964,819	4,914,265	5,093,179	1,130,122	63,314,741
1933 ..	25,562,220	15,321,398	10,826,016	4,909,588	5,282,989	1,107,800	63,010,011
1934 ..	25,173,199	15,311,461	11,139,229	4,930,271	5,389,931	1,134,129	63,078,220
1935 ..	26,275,459	15,536,111	12,958,956	5,080,319	5,868,396	1,230,034	66,949,275
1936 ..	27,701,005	16,390,943	12,385,742	5,462,146	6,094,910	(b) 1,659,021	69,693,767

(a) Traffic Train-Miles (exclusive of "Assistant" and "Light" mileages), and petrol rail car mileages previously excluded.

(b) Includes steam

5. Lines under Construction, and Lines Authorized, 1936.—(i) *General.* The following statement gives particulars at the 30th June, 1936, of the mileage of State railways (a) under construction; and (b) authorized for construction but not commenced :—

RAILWAYS, STATE.—MILEAGE UNDER CONSTRUCTION AND AUTHORIZED, 30th JUNE, 1936.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	All States.
Mileage under construction	153.31	38.00	(c)	27.75	..	..	219.06
Mileage authorized but not commenced	219.76	39.50	1,130.00	26.25	399.23	..	1,814.74

(a) Exclusive of 127 miles on which work has been suspended.

(b) Exclusive of 65.75 miles on which work has been suspended.

(c) 186 miles on which work has been suspended.

(ii) *Lines under Construction.* In spite of the great extensions of State railways since the year 1875, there are still, in some of the States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States is to extend the existing lines inland in the form of light railways as settlement increases, and while it is

true that lines which were not likely to be commercially successful in the immediate future have been constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting is kept in view.

(a) *New South Wales.* In addition to that shown under (b) below, preliminary construction work has been commenced on the Sandy Hollow to Maryvale (approximately 147 miles) and Sutherland to Cronulla (6.31 miles) railways in New South Wales. Work was suspended in 1930 on the Guyra to Dorrigo (89 miles) and Casino to Bonalbo (38 miles) lines.

(b) *Victoria.* In this State 35.50 miles of 5 ft. 3 in. gauge lines have been partially constructed, from Nowingi to Millewa South, work thereon being temporarily suspended. Under the provisions of the Border Railways Act 1922 (Vic. 3194) the following lines are under construction in New South Wales territory, viz.:—Euston to Lette (30.25 miles); and Yarrawonga to Oaklands (38 miles). Work has also been suspended on the former line while traffic on the latter is being conducted by the Constructing Authority pending the transfer to the Railways Commissioners. On completion, these lines, which are of 5 ft. 3 in. gauge, will be taken over and operated by the Victorian Railways Commissioners.

(c) *Queensland.* In previous issues of the Year Book details were given of the scheme of railway construction under the provisions of the North Coast Railway Act 1910 (*see* Year Book No. 15, p. 551). On the 30th June, 1936, no railway construction work was in progress. The following lines are partially constructed, but work thereon is temporarily suspended:—Goondoon to Kallliwa Creek (18 miles); Yataka to Powell's Creek (27 miles); Dajarra to Moonah Creek (41 miles); Rannes to Monto (63 miles); and Winton to 37-Mile (37 miles); a total of 186 miles.

(d) *South Australia.* The construction of a line of 5 ft. 3 in. gauge, 27.75 miles in length, between Redhill and Port Pirie, to connect with the 4 ft. 8½ in. gauge line being constructed by the Commonwealth Authorities between Port Augusta and Port Pirie, has been commenced. For further particulars, *see* § 2, paragraph 4, pages 125-6.

(e) *Other States.* At 30th June, 1936, no railway construction work was in progress in Western Australia and Tasmania.

(iii) *Lines Authorized for Construction.* (a) *New South Wales.* At the 30th June, 1936, the following lines had been authorized for construction but not commenced:—Gilgandra to Collie (21.54 miles); Jerilderie towards Deniliquin (25.00 miles); Rand to Bull Plain (27.55 miles); Canowindra to Gegra (33.87 miles); St. Leonards to Eastwood (9.07 miles); Inverell to Ashford (32 miles); Bungendore to Captain's Flat (21.18 miles); Gwabegar to Burren Junction (30.25 miles); Eastern Suburbs to Bondi (7.75 miles); and Western Suburbs to Western Road (5.55 miles); a total distance of 219.76 miles.

(b) *Victoria.* The following lines were authorized, but construction had not been commenced up to the end of June, 1936:—5 ft. 3 in. gauge: La La Siding to Big Pat's Creek (2.50 miles); Casterton to Nangeela (9 miles); and Orbest to Brodribb (0 miles). Under the Border Railways Act 1922, the following line has been authorized for construction in New South Wales Territory:—Mildura to Gol Gol (22 miles).

(c) *Queensland.* In addition to the new lines upon which work has been commenced, Parliament has authorized the construction of the following parts of the Great Western Railway—Section A, from Quilpie to Eromanga (120 miles); Section B, from Powell's Creek (224 miles); Section C, from 37-Mile to Springvale (324 miles); and Section D from Moonah Creek (216 miles). The following lines were also authorized for construction:—Texas to Silverspur (9 miles); Mount Edwards to Maryvale (28 miles); Lanefield to Rosevale (17 miles); Gattou to Mount Sylvia (11 miles); Wandoo to Taroom (42 miles); Dirranbandi extension (52 miles); Yarraman to Nanango (16 miles); Brooloo to Kenilworth (10 miles); Dobbyn to Myally Creek (50 miles); and Pearamon towards Boongee (11 miles).

(d) *South Australia.* Parliament has authorized the construction of a line on the 3 ft. 6 in. gauge from Kielpa to Mangalo Hall (26.25 miles). The survey has been completed, but the work cannot be started without a special resolution of both Houses of Parliament.

(e) *Western Australia.* The following lines were authorized for construction up to the 30th June, 1936:—Yarramony to Merredin (85 miles); Brookton to Dale River (28 miles); Boyup Brook to Cranbrook (95.23 miles); Manjimpup to Mount Barker (107 miles); Leighton to Robb's Jetty (4.62 miles); Southern Cross—Southwards (27.38 miles); Yuna to Dartmoor (52 miles); a total distance of 399.23 miles. The surveys have been completed in respect of all the above lines, except the Manjimpup to Mount Barker and the Leighton to Robb's Jetty lines.

(f) *Tasmania.* There were no new railways authorized at 30th June, 1936.

6. *Cost of Construction and Equipment.*—(i) *General.* The total cost of construction and equipment of the State railways as distinct from those owned by the Commonwealth Government at the 30th June, 1936, amounted to £322,041,276, representing an average cost of £47.53 per head of population. If the cost of railways owned by the Commonwealth Government is included, the total capital cost (£337,940,914) is equivalent to an amount of £49.88 per head of the population of the Commonwealth, while the total mileage open (27,088.89 miles) per 1,000 of population is 4.00. Particulars of the capital expenditure incurred on lines open for traffic are given in the following table:—

RAILWAYS, STATE.—MILEAGE AND COST TO 30th JUNE, 1936.

State.	Length of Line Open (Route).	Total Cost of Construction and Equipment.(e)	Average Cost per Mile Open.	Cost per Head of Population.	Mileage per 1,000 of Population.
	Miles.	£	£	£	Miles.
New South Wales (a) ..	(b)6,124.19	(d)143,843,072	(d) 23,488	53.77	2.29
Victoria ..	4,720.77	76,534,378	16,212	41.44	2.56
Queensland ..	(b)6,566.65	(d)36,264,700	(d) 5,523	36.97	6.69
South Australia (a) ..	2,529.35	29,066,465	11,492	49.05	4.27
Western Australia (a) ..	4,358.34	25,297,832	5,804	56.19	9.68
Tasmania ..	644.89	6,672,329	10,346	29.07	2.81
All States ..	24,944.19	(c)322,041,276	(c) 12,910	47.53	3.68

(a) Exclusive of Federal railways.

gauge line—New South Wales 26 miles, Queensland 68.82 miles (see par. 4, page 121).

Grafton-South Brisbane line, £4,362,500.

(b) Includes portion of Grafton-South Brisbane uniform

(c) Includes

(d) Exclusive of Grafton-South Brisbane line.

(e) See

Excluding Queensland, the lowest average cost (£5,804) per mile open is in Western Australia, and the highest (£23,488) in New South Wales, as compared with an average of £12,910 for all States. There were few costly engineering difficulties in Western Australia, and the fact that contractors were permitted to carry traffic during the term of their contracts considerably reduced expenditure, particularly in respect of all gold-field contracts.

In Queensland a reduction of £28,000,000 in the capital cost of the railways was effected by The Railway (Capital Indebtedness) Reduction Act of 1931, it being considered inequitable to burden the Department with interest charges on capital expended on railways for the purpose of developing the State.

The large increases in the capital cost of the New South Wales railways during the last few years are mainly attributable to the electrification of suburban lines and the construction of the underground city railway.

In the table above, the figures relating to cost of construction and equipment do not include particulars of charges for works in course of construction, surveys, discounts and flotation charges on loans allocated to the railways, etc. This will explain the differences between the amounts shown therein for the various States and those shown in the several Railway Reports.

(ii) *Capital Cost, All Lines.* (a) *Total.* The increase in the total capital cost of construction and equipment of Government railways for each year from 1932 to 1936 is shown in the following table:—

RAILWAYS, STATE.—CAPITAL COST.

Year ended 30th June—	N.S.W. £	Victoria. £	Q'land. £	S. Aust. £	W. Aust. £	Tasmania. £	All States. £
TOTAL COST OF CONSTRUCTION AND EQUIPMENT OF LINES OPEN.							
1932 ..	137,792,319d	74,415,458	£33,384,190d	27,202,936	23,648,654	6,561,429	6307,875,986
1933 ..	138,921,968d	74,709,739	34,098,724d	27,167,939	24,159,732	6,560,434	6309,986,874
1934 ..	139,058,321d	75,225,493	34,389,657d	27,176,188	24,704,212	6,561,337	6311,486,688
1935 ..	139,851,912d	75,454,243	35,010,298d	27,295,654	24,947,843	6,587,312	6313,510,841
1936(d) ..	143,843,072d	76,534,378	36,264,700d	29,066,465	25,297,832	6,672,329	6322,041,276

COST PER MILE OPEN.

	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
1932 ..	(a) 22,493	15,763	(a) 5,167	10,756	5,584	10,173	(b) 12,407
1933 ..	(a) 20,915	15,833	(a) 5,193	10,743	5,569	10,173	(b) 12,418
1934 ..	(a) 22,560	15,935	(a) 5,237	10,745	5,666	10,175	(b) 12,467
1935 ..	(a) 22,689	15,983	(a) 5,332	10,791	5,724	10,216	(b) 12,548
1936 ..	(a) 23,488	16,212	(a) 5,523	11,492	5,804	10,346	(b) 12,910

(a) Exclusive of Grafton-South Brisbane line. (b) Includes Grafton-South Brisbane line.
 (c) The Capital Account was reduced by £28,000,000, in accordance with The Railway (Capital Indebtedness) Reduction Act of 1931. (d) See § 1, paragraph 2, p. 121.

(b) *From Consolidated Revenue.* The following table shows the amounts provided from Consolidated Revenue for construction and equipment to 30th June, 1936:—

RAILWAYS, STATE.—EXPENDITURE FROM CONSOLIDATED REVENUE FOR CONSTRUCTION AND EQUIPMENT TO 30th JUNE, 1936.

To 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
	£	£	£	£	£	£	£
1936 ..	666,864	5,798,006	..	..	640,020	16,935	7,121,825

(iii) *Loan Expenditure.* The subjoined table shows the total net loan expenditure on Government railways in each State for the years 1932 to 1936:—

RAILWAYS, STATE.—NET LOAN EXPENDITURE.

Year ended 30th June—	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
	£	£	£	£	£	£	£
1932 ..	1,052,137	..	50,275	Cr. 127,576	137,025	Cr. 15,008	1,096,853
1933 ..	214,885	..	Cr. 28,829	Cr. 101,622	180,495	Cr. 6,682	258,247
1934 ..	122,203	1,044	341,917	Cr. 79,856	316,081	Cr. 644	700,745
1935 ..	1,237,533	..	785,103	40,043	295,076	39,426	2,397,181
1936 ..	2,201,837	280,900	692,830	420,233	116,240	47,859	3,759,899

(a) Gross expenditure.

The following statement shows the total loan expenditure on railways to the 30th June, 1936 :—

RAILWAYS, STATE.—TOTAL LOAN EXPENDITURE TO 30th JUNE, 1936.

State.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.(c)	All States.
Expenditure	£ 61,467,716,614	£ 47,478,077	£ 63,471,984	£ 34,225,173	£ 24,767,222	£ 7,109,190	£ 351,070,260

(a) Gross expenditure. (b) Includes expenditure on Grafton-South Brisbane Railway. (c) Includes losses funded.

7. Gross Revenue.—(i) *General.* The total revenue from all sources, the revenue per average mile worked, and the revenue per train-mile run during each financial year from 1932 to 1936 inclusive were as follows :—

RAILWAYS, STATE.—GROSS REVENUE.

Year ended 30th June—	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
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TOTAL GROSS REVENUE.

	£	£	£	£	£	£	£
1932	15,801,022	9,454,304	5,994,523	2,746,341	2,922,385	381,283	37,299,858
1933	16,205,320	9,446,121	5,992,394	2,734,083	2,932,140	381,483	37,691,541
1934	15,690,186	9,175,111	6,230,188	2,559,939	2,919,315	390,003	36,965,642
1935	16,802,699	9,421,092	7,167,073	2,658,390	3,311,839	399,764	39,760,857
1936	17,753,581	9,689,925	6,697,361	2,878,198	3,446,161	448,614	40,913,840

GROSS REVENUE PER AVERAGE MILE WORKED.

	£	£	£	£	£	£	£
1932	2,612	2,003	915	1,086	693	591	1,510
1933	2,631	2,001	913	1,081	685	592	1,514
1934	2,546	1,943	949	1,012	671	606	1,480
1935	2,726	1,996	1,092	1,051	760	620	1,591
1936	2,899	2,053	1,020	1,138	791	696	1,640

GROSS REVENUE PER TRAIN-MILE RUN.

	d.	d.	d.	d.	d.	d.	d.
1932	146.71	147.69	131.21	134.12	137.71	80.97	141.39
1933	152.15	147.97	132.84	133.65	133.20	82.65	143.56
1934	149.59	143.82	134.23	124.62	129.99	82.72	140.65
1935	153.48	145.54	132.73	125.59	135.44	78.00	142.53
1936	153.82	141.88	129.78	126.46	135.70	(c) 64.90	140.89

(a) Includes £800,000, contributions from consolidated revenue towards losses on working of country developmental lines. (b) Includes contributions from consolidated revenue in respect of losses on non-paying lines, 1931-32, £130,420; 1932-33, £124,288; 1933-34, £134,424; 1934-35, £140,614, and 1935-36, £163,859. (c) See Note (b), paragraph 4, p. 137.

The amounts of revenue earned per average mile worked and per train-mile run during 1935-36 in respect of (a) passenger and (b) goods and live stock traffic, separately, are given later.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Totals.* The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and live stock; and (c) rents and miscellaneous items. The subjoined table shows the gross revenue from 1932 to 1936, classified according to the three chief sources of receipts. The total of the three items specified has already been given in the preceding paragraph.

RAILWAYS, STATE.—COACHING, GOODS, ETC., RECEIPTS.

Year ended 30th June—	N.S.W. £	Victoria. £	Q'land. £	S. Aust. £	W. Aust. £	Tas. £	All States. £
COACHING TRAFFIC RECEIPTS.							
1932 ..	5,606,439	3,946,053	1,762,225	631,104	649,890	132,456	12,728,158
1933 ..	5,693,953	3,968,871	1,768,247	655,799	662,444	126,273	12,875,587
1934 ..	5,555,290	3,904,663	1,872,598	646,784	686,480	128,079	12,795,894
1935 ..	5,867,820	4,087,945	1,946,526	653,610	731,449	132,566	13,419,916
1936 ..	6,186,662	4,129,493	1,974,379	686,489	741,924	141,270	13,860,217

GOODS AND LIVE STOCK TRAFFIC RECEIPTS.

1932 ..	7,853,315	4,805,738	4,008,966	1,948,293	2,106,129	234,986	20,957,427
1933 ..	8,169,056	4,773,099	4,006,279	1,924,982	2,110,065	240,975	21,225,059
1934 ..	7,802,139	4,572,038	4,146,808	1,762,500	2,059,813	248,291	20,591,949
1935 ..	8,582,612	4,555,722	4,987,309	1,853,188	2,405,046	255,428	22,639,305
1936 ..	9,154,921	4,708,127	4,481,887	2,027,287	2,526,019	294,144	23,252,985

MISCELLANEOUS RECEIPTS.

	(a)	(b)					
1932 ..	2,341,277	702,513	223,332	166,944	166,366	13,841	3,014,273
1933 ..	2,342,311	703,551	217,868	153,302	159,631	14,232	3,590,895
1934 ..	2,332,766	698,410	210,782	150,256	171,022	14,563	3,577,799
1935 ..	2,352,267	777,425	233,238	151,592	175,344	11,770	3,701,636
1936 ..	2,411,998	792,305	241,095	164,422	177,618	13,200	3,800,638

(a) See note (a) to Gross Revenue table on previous page.

(b) See note (b) to Gross Revenue table on previous page.

(b) *Percentages.* The following table shows for the two years 1934-35 and 1935-36 the percentage which each class of receipts bears to the total gross revenue :—

RAILWAYS, STATE.—PERCENTAGES OF RECEIPTS.

State.	1934-35.			1935-36.		
	Coaching.	Goods and Live Stock.	Miscellaneous.	Coaching.	Goods and Live Stock.	Miscellaneous.
	%	%	%	%	%	%
New South Wales ..	34.92	51.08	14.00	34.85	51.57	13.58
Victoria ..	43.39	48.36	8.25	42.62	49.21	8.17
Queensland ..	27.16	69.59	3.25	29.48	66.92	3.60
South Australia ..	24.59	69.71	5.70	23.85	70.44	5.71
Western Australia ..	22.09	72.62	5.29	21.53	73.32	5.15
Tasmania ..	33.16	63.89	2.95	31.49	65.57	2.94
All States ..	33.75	56.94	9.31	33.88	56.83	9.29

(c) *Averages for Passenger Earnings.* The subjoined table shows the passenger earnings per average mile of line worked and per passenger-train-mile in each State for the year ended the 30th June, 1936. Further particulars of passenger-mileage will be found in sub-paragraph 14 (i) hereinafter.

RAILWAYS, STATE.—PASSENGER EARNINGS, AVERAGES, 1935-36.

State.	Number of Passenger-Train-Miles.	Number of Passenger Journeys.	Passenger Earnings.			
			Gross.	Per Average Mile Worked.	Per Passenger-Train-Mile.	Per Passenger Journey.
	No.	No.	£	£	d.	d.
New South Wales ..	17,448,049	171,142,729	5,433,176	887	74.73	7.62
Victoria ..	11,458,026	139,539,089	3,713,411	787	77.78	6.39
Queensland (b) ..	5,430,062	25,158,926	1,409,550	220	64.95	14.02
South Australia ..	3,423,266	17,430,674	548,577	217	38.46	7.55
Western Australia ..	(a) 2,428,226	12,421,527	564,365	129	55.78	10.90
Tasmania ..	(a) 613,133	2,321,823	120,328	187	47.10	12.44
All States ..	40,800,762	368,014,768	11,849,413	476	69.70	7.73

(a) Includes "Assistant" and "Light" mileage. (b) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line.

(d) *Averages for Goods and Live Stock Traffic.* The gross receipts from goods and live stock traffic per average mile worked, per goods-train-mile, and per ton carried, for the year ended the 30th June, 1936, are given below. Particulars of ton-mileage will be found in sub-paragraph 14 (ii) hereinafter.

RAILWAYS, STATE.—GOODS AND LIVE-STOCK TRAFFIC RECEIPTS, AVERAGES, 1935-36.

State.	Number of Goods-Train-Miles.	Goods and Live-stock Tonnage.	Goods and Live-Stock Traffic Receipts.			
			Gross.	Per Average Mile Worked.	Per Goods-Train-Mile.	Per Ton Carried.
	No.	Tons.	£	£	d.	d.
New South Wales ..	10,252,956	613,514,075	9,154,921	1,495	214.30	162.58
Victoria ..	4,932,917	6,424,094	4,768,127	1,010	231.98	178.13
Queensland (c) ..	6,847,142	4,589,267	4,411,617	679	154.63	230.71
South Australia ..	2,038,880	2,464,711	2,027,287	801	238.64	197.41
Western Australia ..	(a) 3,830,211	2,886,648	2,526,619	580	158.32	210.07
Tasmania ..	(a) 805,026	769,841	294,144	456	87.69	91.70
All States ..	28,707,132	30,648,636	23,182,715	932	193.81	181.54

(a) Includes "Assistant" and "Light" mileage. (b) Exclusive of 324,937 tons of coal on which way leave charges only were collected. (c) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line.

8. *Working Expenses.*—(i) *General.* In order to make an adequate comparison of the working expenses, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the railways of the different States, but also on different portions of the same systems. When traffic is light, the percentage of working expenses is naturally greater than when traffic is heavy; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading.

The following table shows the total annual expenditure and the percentage thereof on gross revenue in each State for the years 1932 to 1936 :—

RAILWAYS, STATE.—WORKING EXPENSES.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
TOTAL WORKING EXPENSES.							
1932	£ 12,532,869	£ 6,181,490	£ 4,429,218	£ 2,130,395	£ 2,123,281	£ 386,929	£ 27,784,182
1933	11,966,648	6,366,838	4,323,655	1,973,545	2,111,588	373,762	27,121,036
1934	11,203,520	6,241,505	4,494,314	2,028,772	2,186,506	385,383	26,540,000
1935	11,565,658	6,505,859	5,086,921	2,241,411	2,382,744	471,944	28,254,537
1936 (a) ..	11,848,070	6,856,497	5,212,926	2,413,614	2,488,117	560,990	29,380,414

PERCENTAGE OF WORKING EXPENSES ON GROSS REVENUE.

1932	% 79.32	% 65.38	% 73.89	% 77.57	% 72.65	% 101.48	% 74.49
1933	73.84	67.40	72.15	72.37	72.02	97.97	71.96
1934	71.40	68.03	72.14	79.25	74.90	98.59	71.80
1935	68.83	69.06	70.88	84.31	71.95	118.06	71.06
1936	66.74	70.76	77.84	83.87	72.20	125.05	71.81

(a) See § 1, paragraph 2, page 121.

The variation in the percentage of working expenses on the gross revenue in each State for the years 1865 to 1936 is illustrated in the graph which accompanies this chapter.

(ii) *Averages.* The next table shows the working expenses per average mile worked and per train-mile run in each State for the years 1932 to 1936 :—

RAILWAYS, STATE.—WORKING EXPENSES, AVERAGES.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
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WORKING EXPENSES PER AVERAGE MILE WORKED.

1932	£ 2,071	£ 1,310	£ 676	£ 842	£ 504	£ 600	£ 1,124
1933	1,943	1,349	659	782	494	580	1,089
1934	1,818	1,322	684	802	503	598	1,063
1935	1,876	1,378	775	886	547	732	1,130
1936	1,935	1,452	794	954	571	870	1,178

WORKING EXPENSES PER TRAIN-MILE RUN.

1932	d. 116.36	d. 96.56	d. 96.95	d. 104.04	d. 100.05	d. 82.17	d. 105.32
1933	112.35	99.73	95.85	96.72	95.93	80.97	103.30
1934	106.81	97.83	96.83	98.76	97.36	81.55	100.98
1935	105.64	100.50	94.21	105.89	97.44	92.08	101.29
1936	102.65	100.39	101.01	106.06	97.97	(a) 81.15	101.17

(a) See note (b), paragraph 4, page 137.

(iii) *Distribution.* The subjoined table shows the distribution of working expenses under four chief heads of expenditure for the years 1932 to 1936 :—

RAILWAYS, STATE.—DISTRIBUTION OF WORKING EXPENSES.

Year ended 30th June—	N.S.W. £	Victoria. £	Q'land. £	S. Aust. £	W. Aust. £	Tas. £	All States. £
MAINTENANCE.							
1932	2,346,791	1,110,987	1,221,829	335,280	470,544	102,116	5,587,547
1933	2,460,825	1,464,041	1,156,044	327,885	493,968	94,756	5,997,521
1934	2,654,375	1,564,771	1,101,699	367,776	552,907	90,441	6,397,969
1935	2,432,517	1,570,137	1,291,450	394,152	553,090	116,000	6,357,346
1936	2,161,368	1,516,786	1,344,313	444,739	568,671	122,111	6,157,988

LOCOMOTIVE, CARRIAGE AND WAGON CHARGES.

1932	5,280,630	2,260,152	1,780,463	1,102,292	978,698	168,194	11,570,429
1933	4,901,900	2,231,648	1,764,705	955,098	960,993	167,005	11,072,609
1934	4,193,295	2,156,706	1,851,705	951,529	956,702	176,451	10,286,388
1935	4,573,455	2,181,626	2,180,556	1,096,904	1,088,138	182,647	11,303,326
1936	4,842,986	2,333,626	2,205,283	1,149,710	1,140,035	214,043	11,885,683

TRAFFIC EXPENSES.

1932	3,059,815	1,690,542	1,177,336	457,706	572,101	92,275	7,049,775
1933	2,771,583	1,628,237	1,136,739	450,886	562,000	87,154	6,636,599
1934	2,612,947	1,647,482	1,210,915	457,182	577,981	90,230	6,596,737
1935	2,726,197	1,713,789	1,320,239	484,831	620,975	98,581	6,964,612
1936	2,925,093	1,707,996	1,349,604	530,897	648,242	112,386	7,364,218

OTHER CHARGES.

1932	1,845,633	1,119,809	249,590	235,117	101,938	24,344	3,576,431
1933	1,742,340	1,042,912	266,107	244,074	94,627	24,247	3,414,307
1934	1,742,903	872,546	269,995	252,285	98,916	22,261	3,258,906
1935	1,833,489	1,040,307	294,676	265,524	120,541	(a) 74,716	3,629,253
1936	1,918,623	1,208,089	313,726	288,468	131,169	(a) 112,450	3,972,525

(a) Includes £54,000, 1935, and £91,000, 1936, to replacement and depreciation fund.

9. *Salaries and Wages.*—The following table shows the total amount paid in salaries and wages in each State during the years 1932 to 1936 :—

RAILWAYS, STATE.—SALARIES AND WAGES PAID.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
TOTAL SALARIES AND WAGES PAID.							
	£	£	£	£	£	£	£
1932	9,637,122	4,435,648	3,341,129	1,382,707	1,620,084	260,943	20,677,633
1933	8,462,906	4,117,160	3,244,342	1,376,676	1,675,594	249,856	19,126,534
1934	8,154,378	4,533,562	3,396,671	1,418,788	1,902,457	259,288	19,665,144
1935	8,782,701	4,698,837	3,805,286	1,492,693	2,050,615	287,853	21,117,985
1936	9,775,667	4,990,163	3,925,060	1,654,653	2,012,361	334,832	22,692,736

10. *Net Revenue.*—(i) *Net Revenue and Percentage on Capital Cost.* The following table shows the net sums available to meet interest charges, also the percentage of such sums upon the capital cost of construction and equipment of lines open for traffic in each State for the years 1932 to 1936 :—

RAILWAYS, STATE.—NET REVENUE AND PERCENTAGE THEREOF ON CAPITAL COST OF LINES OPEN.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
NET REVENUE.							
	£	£	£	£	£	£	£
1932	3,268,153	3,272,814	1,565,305	615,946	799,104	— 5,646	9,515,676
1933	4,238,672	3,079,283	1,668,739	755,538	820,552	7,721	10,570,505
1934	4,486,666	2,933,606	1,735,874	531,167	732,809	5,520	10,425,642
1935	5,237,041	2,915,233	2,080,152	416,979	929,095	— 72,180	11,506,320
1936	5,905,511	2,833,428	1,484,435	464,384	958,944	— 112,376	11,533,426

PERCENTAGE OF NET REVENUE ON CAPITAL COST.(a)

	%	%	%	%	%	%	%
1932	2.37	4.40	4.62	2.26	3.37	— 0.09	3.09
1933	3.05	4.12	4.81	2.78	3.40	0.12	3.41
1934	3.23	3.90	4.99	1.95	2.97	0.08	3.35
1935	3.74	3.86	5.94	1.53	3.72	— 1.10	3.67
1936	4.11	3.70	4.09	1.60	3.79	— 1.68	3.58

(a) The cost of the Grafton-South Brisbane line is excluded from New South Wales and Queensland, but is included with "All States."

These figures are also represented in the graphs which accompany this Chapter.

(ii) *Net Revenue, Averages.* Tables showing the gross earnings and the working expenses per average mile worked and per train-mile run have been given previously. The net earnings, *i.e.*, the excess of gross earnings over working expenses, per average mile worked and per train-mile run are shown in the following table :—

RAILWAYS, STATE.—NET REVENUE, AVERAGES.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
NET REVENUE PER AVERAGE MILE WORKED.							
	£	£	£	£	£	£	£
1932	540	693	239	243	190	— 9	385
1933	688	652	254	299	192	12	425
1934	728	621	265	209	168	8	417
1935	850	618	317	165	213	— 112	461
1936	964	601	226	184	220	— 174	462

NET REVENUE PER TRAIN-MILE RUN.

	d.	d.	d.	d.	d.	d.	d.
1932	30.34	51.12	34.26	30.08	37.65	— 1.20	36.07
1933	39.79	48.24	36.99	36.93	37.28	1.67	40.26
1934	42.78	45.99	37.40	25.86	32.63	1.17	39.67
1935	47.84	45.04	38.52	19.70	38.00	— 14.08	41.25
1936	51.17	41.49	28.77	20.40	37.73	a— 16.25	39.72

(a) See note (b), paragraph 4, page 137.

11. Interest.—The amount of interest payable on expenditure from loans on the construction and equipment of the railways in each State during the five years ended 30th June, 1936, was as follows:—

RAILWAYS, STATE.—INTEREST ON RAILWAY LOAN EXPENDITURE.

Year ended 30th June—	N.S.W.*	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
AMOUNT OF INTEREST PAYABLE.							
	£	£	£	£	£	£	£
1932	a6,519,217	3,641,109	a1,589,643	1,217,338	989,173	263,900	a14,328,560
1933	a6,352,581	3,221,710	a1,595,522	1,137,193	996,233	263,861	a13,673,133
1934	a5,971,412	3,181,736	a1,565,343	1,088,627	1,008,453	246,762	a13,165,484
1935	a5,677,540	3,056,766	a1,576,693	1,055,954	1,028,569	247,727	a12,746,007
1936(b)	a5,700,000	3,032,530	a1,591,788	1,061,393	1,015,521	247,732	a12,767,881

(a) Including interest charges on the Grafton-South Brisbane line, which for the year 1935-36 amounted to £218,125 and was contributed by New South Wales, £72,179; Queensland, £27,029; and the Commonwealth, £118,917. See § 1, paragraph 4, p. 121. (b) See § 1, paragraph 2, p. 121.

The interest payable on the cost of construction and equipment, the expenditure from consolidated revenue (£7,121,825) for that purpose being deducted, was at the rate of 4.05 per cent. in 1935-36.

Exchange on interest payments abroad is not included in the above table. This item is not charged against the railways in Queensland, Western Australia and Tasmania and the figures for these States are not available. In the remaining States the amounts apportioned since 1931-32 were as follows:—

RAILWAYS, STATE.—EXCHANGE ON OVERSEA INTEREST PAYMENTS.

Year ended 30th June—	New South Wales.	Victoria.	South Australia.
	£	£	£
1932	1,313,541	440,938	176,913
1933	1,191,937	402,705	180,826
1934	1,103,381	354,335	157,001
1935	843,012	300,302	130,649
1936	903,773	310,530	121,734

12. Profit or Loss.—The following table shows the actual profit or loss after deducting working expenses and interest and all other charges, excepting exchange payments, from the gross revenue, and the percentage of such profit or loss on the total capital cost of construction and equipment for the last five years:—

RAILWAYS, STATE.—PROFIT OR LOSS.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
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PROFIT OR LOSS AFTER PAYMENT OF WORKING EXPENSES, INTEREST, AND OTHER CHARGES.

	£	£	£	£	£	£	£
1932	a-3,251,064	- 368,295	- 24,338a	- 601,392	- 190,069	- 269,546	a-4,812,884
1933	a-2,113,909	- 142,427	- 73,217a	- 381,655	- 175,681	- 256,140	a-3,102,628
1934	a-1,484,746	- 248,130	- 170,531a	- 557,400	- 275,644	- 241,242	a-2,739,842
1935	a- 440,499	- 141,533	- 503,459a	- 518,975	- 99,474	- 265,907	a-1,065,687
1936	a+ 205,511	- 199,102	- 107,353a	- 597,009	- 57,477	- 360,108	a-1,234,455

PERCENTAGE OF PROFIT OR LOSS ON CAPITAL COST OF CONSTRUCTION AND EQUIPMENT.(b)

	%	%	%	%	%	%	%
1932	-2.36	-0.49	-0.07	-2.21	-0.80	-4.11	-2.56
1933	-1.52	-0.19	+0.21	-1.40	-0.73	-3.90	-1.00
1934	-1.07	-0.33	+0.53	-2.05	-1.12	-3.68	-0.88
1935	-0.31	-0.19	+1.44	-1.90	-0.40	-4.04	-0.34
1936	+0.14	-0.26	-0.30	-2.05	-0.23	-5.40	-0.38

(a) See Note (a) paragraph 11 above.

(b) See Note (a) paragraph 10 (i) on previous page.

13. *Traffic.*—(i) *General.* Reference has already been made to the difference in the traffic conditions on many of the lines. These conditions differ not only in the several States, but also on different lines in the same States, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is confined to a fringe of country near the coast, more especially in the eastern and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition.

The following table gives particulars for the years 1932 to 1936 :—

RAILWAYS, STATE.—TRAFFIC.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
NUMBER OF PASSENGER JOURNEYS.							
1932 ..	128,359,419	125,990,585	20,761,976	15,608,245	10,394,311	1,680,897	302,795,433
1933 ..	132,867,221	130,190,013	22,216,409	16,074,221	11,732,291	1,678,483	314,758,638
1934 ..	142,520,429	131,367,215	22,877,900	16,325,004	12,103,104	1,789,329	326,982,981
1935 ..	160,211,508	139,689,012	24,328,300	16,660,213	12,876,378	2,133,541	355,898,952
1936 ..	171,142,729	139,539,089	25,243,901	17,430,674	12,421,527	2,321,823	368,090,743

PER 100 OF MEAN POPULATION.

1932 ..	4,999	6,984	2,231	2,705	2,397	744	4,630
1933 ..	5,128	7,173	2,361	2,774	2,685	736	4,775
1934 ..	5,454	7,198	2,407	2,803	2,748	781	4,924
1935 ..	6,060	7,607	2,532	2,828	2,906	931	5,310
1936 ..	6,419	7,571	2,597	2,948	2,774	1,008	5,453

PER AVERAGE MILE OF LINE WORKED.

1932 ..	21,216	26,693	3,170	6,172	2,467	2,606	12,255
1933 ..	21,574	27,577	3,384	6,355	2,742	2,603	12,643
1934 ..	23,122	27,826	3,484	6,454	2,782	2,775	13,092
1935 ..	25,992	29,589	3,705	6,587	2,954	3,308	14,245
1936 ..	27,945	29,559	3,844	6,891	2,850	3,600	14,757

TONNAGE OF GOODS AND LIVE STOCK CARRIED.

1932 ..	10,211,322	6,186,081	3,860,668	2,419,094	2,847,568	440,030	25,073,772
1933 ..	11,147,866	6,244,340	3,023,008	2,387,517	2,840,077	510,565	20,816,299
1934 ..	11,364,235	5,858,377	4,214,382	2,141,646	2,652,247	560,611	26,791,498
1935 ..	13,018,620	6,009,061	4,870,019	2,333,581	2,993,481	673,227	29,821,869
1936 ..	13,830,012	6,424,094	4,663,567	2,404,711	2,880,048	769,841	31,047,873

PER 100 OF MEAN POPULATION.

1932 ..	398	343	415	419	657	199	397
1933 ..	430	344	392	412	650	224	407
1934 ..	435	321	443	368	602	245	403
1935 ..	492	327	508	396	655	296	445
1936 ..	519	349	480	417	645	334	460

RAILWAYS, STATE.—TRAFFIC—continued.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
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PER AVERAGE MILE OF LINE WORKED.

1932 ..	1,688	1,311	589	956	676	696	1,051
1933 ..	1,810	1,323	561	944	664	792	1,077
1934 ..	1,844	1,241	642	847	610	869	1,073
1935 ..	2,112	1,273	743	922	666	1,052	1,194
1936 ..	2,260	1,361	710	974	662	1,194	1,245

(ii) *Metropolitan and Country Passenger Traffic and Revenue.* A further indication of the difference in passenger traffic conditions is obtained from a comparison of the volume of metropolitan and suburban and country traffic in each State. This is shown below for the year 1935-36 :—

RAILWAYS, STATE.—METROPOLITAN AND SUBURBAN, AND COUNTRY PASSENGER TRAFFIC AND RECEIPTS, 1935-36.

State.	Passenger Journeys.			Revenue.		
	Metropolitan and Suburban.	Country.	Total.	Metropolitan and Suburban.	Country.	Total.
	No.	No.	No.	£	£	£
N.S.W. ..	161,060,954	10,081,775	171,142,729	2,618,310	2,814,866	5,433,176
Victoria ..	134,037,069	5,502,020	139,539,089	2,304,047	1,409,364	3,713,411
Queensland ..	20,229,494	5,014,407	25,243,901	289,234	1,221,996	1,511,230
S. Australia	16,290,777	1,139,897	17,430,674	224,006	324,571	548,577
W. Australia	11,024,990	1,396,537	12,421,527	140,535	423,830	564,365
Tasmania ..	(a)	(a)	2,321,823	(a)	(a)	120,328
Total ..	342,643,284 (b)	23,134,639 (b)	365,999,743	5,576,132 (b)	6,194,627 (b)	11,891,087

(a) Not available.

(b) Incomplete, exclusive of Tasmania.

(iii) *Electrification of Suburban and Country Railways.* Reference to the electrification of the Melbourne and Sydney suburban railways will be found in Year Book No. 22, p. 285.

(iv) *Goods Traffic.* (a) *Classification.* The differing conditions of the traffic in each State might also, to some extent, be analysed by an examination of the tonnage of various classes of commodities carried, and of the revenue derived therefrom. Comparative particulars regarding the quantities of some of the leading classes of commodities

carried are available for all the States, and the following table shows the number of tons of various representative commodities carried, with the percentage of each class on the total, for the financial year 1935-36 :—

RAILWAYS, STATE.—CLASSIFICATION OF COMMODITIES CARRIED, 1935-36.

State.	Coal and Coke.	Other Minerals.	Grain and Flour.	Hay, Straw and Chaff.	Wool.	Live Stock.	All other Com- modities.	Total
TONS CARRIED.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
New South Wales	6,703,647	1,269,406	1,986,624	245,820	176,181	799,698	2,657,586	13,839,012
Victoria ..	242,060	225,033	1,265,968	191,327	58,577	661,070	3,705,353	6,124,094
Queensland ..	616,732	580,820	262,715	2,745,591	64,575	354,544	2,029,590	4,663,567
South Australia	126,302	578,922	696,455	32,651	32,950	130,155	801,237	2,404,711
Western Australia	269,558	349,934	668,431	55,678	30,529	107,474	1,375,044	2,886,648
Tasmania ..	419,009	(b)	(a)49,927	20,405	4,282	24,198	252,020	769,841
All States ..	8,377,358	3,014,085	4,960,131	1,294,622	377,102	2,083,745	10,940,830	31,047,873

PERCENTAGE OF TOTAL TONNAGE CARRIED.

	%	%	%	%	%	%	%	%
New South Wales	48.44	9.17	14.36	1.78	1.27	5.75	19.20	100.00
Victoria ..	3.77	3.52	19.71	3.03	1.06	10.30	58.61	100.00
Queensland ..	13.22	12.65	5.63	16.00	1.38	7.60	43.52	100.00
South Australia	5.12	23.49	28.26	1.33	1.34	3.72	47.63	100.00
Western Australia	9.34	12.12	24.20	1.93	1.06	5.32	34.94	100.00
Tasmania ..	54.43	(b)	6.48	2.65	0.56	3.14	32.74	100.00
All States ..	26.98	9.71	15.98	4.17	1.21	6.71	35.24	100.00

(a) Includes other agricultural produce.

(b) Included with coal and coke.

(b) *Revenue.* The following table shows the revenue derived from goods and live stock traffic during 1935-36 according to a classification which has been adopted by all States :—

RAILWAYS, STATE.—GOODS, ETC., TRAFFIC—REVENUE, 1935-36.

Class.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
General merchandise	5,732,147	3,045,195	3,036,150	1,005,654	1,691,641	185,751	14,696,538
Wheat ..	(a)	661,516	(a)	344,554	367,901	(a)	1,374,007
Wool ..	642,403	189,180	317,588	20,630	85,584	5,233	1,310,718
Live stock ..	1,955,511	722,533	522,111	162,429	127,746	19,093	2,610,023
Minerals—							
Coal and coke ..	1,371,564	78,064	269,254	34,309	155,637	(b) 32,088	1,940,910
Others ..	353,206	71,607	336,784	409,703	98,020	(c) 51,379	1,320,699
Total ..	9,154,921	4,768,127	4,481,887	2,027,287	2,526,619	294,144	23,252,985

(a) Included with General Merchandise.

(d) Incomplete.

(b) Native coal.

(c) Minerals other than native coal.

In New South Wales and Victoria, electric motor coaches are used for the transfer of parcels from the central stations to suburban stations, and in Victoria to convey luggage and parcels between the two main terminal stations.

14. Passenger-Mileage and Ton-Mileage.—(i) *Passenger-Miles.* The subjoined table gives particulars of passenger-mileage in respect of all States for the years 1931-32 to 1935-36.

RAILWAYS, STATE.—SUMMARY OF "PASSENGER-MILES."

Year ended 30th June—	Passenger Train-Mileage.	Number of Passenger Journeys.	Total Passenger-Miles.	Amount Received from Passengers.	Average Number of Passengers carried per Train-Mile.	Average Mileage per Passenger Journey.	Average Earnings per Passenger-Mile.	Average Fare per Passenger Journey.	Density of Traffic per Average Mile Worked.
	Miles. (000 omitted.)	No. (000 omitted.)	No. (000 omitted.)	£	No.	Miles.	d.	d.	No.
NEW SOUTH WALES.									
1932	17,148	128,359	1,366,764	4,943,790	80	10.64	0.86	9.24	220,768
1933	16,382	132,867	1,422,105	5,025,484	87	10.70	0.85	9.08	230,911
1934	16,326	142,520	1,543,531	4,869,235	95	10.83	0.76	8.20	250,418
1935	16,926	160,212	1,745,075	5,153,196	103	10.89	0.71	7.72	283,115
1936	17,448	171,143	1,864,368	5,433,176	107	10.89	0.70	7.62	304,427
VICTORIA.									
1932	10,534	125,991	1,053,215	3,514,104	100	8.35	0.80	6.69	223,138
1933	10,541	130,190	1,087,543	3,561,588	103	8.35	0.79	6.57	230,363
1934	10,559	131,367	1,070,081	3,502,513	102	8.22	0.78	6.40	228,761
1935	10,854	139,689	1,156,142	3,685,978	107	8.28	0.77	6.33	244,894
1936	11,458	139,539	1,180,297	3,713,411	107	8.46	0.76	6.39	250,022
QUEENSLAND.(b)									
1932	4,625	20,695	(a)	1,290,225	(a)	(a)	(a)	14.96	(a)
1933	4,658	22,147	(a)	1,301,405	(a)	(a)	(a)	14.10	(a)
1934	4,808	22,806	(a)	1,375,542	(a)	(a)	(a)	14.48	(a)
1935	5,082	24,250	(a)	1,448,924	(a)	(a)	(a)	14.34	(a)
1936	5,430	25,159	(a)	1,469,556	(a)	(a)	(a)	14.02	(a)
SOUTH AUSTRALIA.									
1932	3,140	15,608	166,407	493,933	53	10.66	0.71	7.59	65,792
1933	3,152	16,074	172,106	519,277	55	10.71	0.72	7.75	68,046
1934	3,202	16,325	175,559	516,253	55	10.75	0.71	7.59	69,411
1935	3,251	16,660	177,055	524,884	55	10.66	0.71	7.56	70,237
1936	3,423	17,431	189,001	548,577	55	10.85	0.70	7.55	74,747
WESTERN AUSTRALIA.									
1932	(c) 1,938	10,394	(a)	489,436	(a)	(a)	(a)	11.30	(a)
1933	(c) 2,181	11,732	(a)	503,177	(a)	(a)	(a)	10.29	(a)
1934	(c) 2,290	12,103	(a)	526,756	(a)	(a)	(a)	10.45	(a)
1935	(c) 2,361	12,876	(a)	563,687	(a)	(a)	(a)	10.51	(a)
1936	(c) 2,428	12,422	(a)	564,365	(a)	(a)	(a)	10.90	(a)
TASMANIA.									
1932	(c) 506	1,681	27,158	107,587	54	16.16	0.95	15.36	42,111
1933	(c) 498	1,678	26,795	104,978	54	15.09	0.94	15.01	41,549
1934	(c) 500	1,789	27,700	107,007	50	15.02	0.92	14.36	43,356
1935	(c) 554	2,134	31,094	111,578	56	14.57	0.86	12.55	48,217
1936	(c) 613	2,322	32,911	120,328	54	14.17	0.88	12.44	51,033

(a) Not available. (b) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line. (c) Includes "Assistant" and "Light" Mileage.

(ii) *Ton-Miles.* Particulars regarding total "ton-miles" are given in the following table for each of the years 1931-32 to 1935-36:—

RAILWAYS, STATE.—SUMMARY OF "TON-MILES."

Year ended 30th June—	Goods-Train-Mileage.	Total Tons Carried.	Total "Ton-miles."	Earnings.	Average Freight-paying Load Carried per "Train."	Average Haul per Ton.	Earnings per "Ton-mile."	Density of Traffic per Average Mile Worked.
	No. (,000 omitted.)	No. (,000 omitted.)	No. (,000 omitted.)	£	Tons.	Miles.	d.	Tons.
NEW SOUTH WALES.								
1932	8,700	d 10,054	1,407,451	7,853,315	162	139.99	1.33	233,030
1933	9,180	d 10,889	1,550,327	8,169,056	169	142.38	1.25	252,129
1934	8,847	d 11,066	1,410,854	7,802,130	159	127.49	1.31	228,892
1935	9,349	d 12,665	1,522,781	8,582,612	163	120.23	1.34	247,951
1936	10,253	d 13,514	1,666,603	9,154,921	163	123.32	1.32	272,134
VICTORIA.								
1932	4,830	6,186	769,228	4,805,738	181	124.34	1.49	162,972
1933	4,781	6,244	734,970	4,773,699	178	117.70	1.55	155,681
1934	4,752	5,858	693,741	4,572,038	146	118.42	1.58	149,948
1935	4,682	6,010	693,783	4,555,722	148	115.44	1.58	140,957
1936	4,933	6,424	759,037	4,768,127	154	118.15	1.51	160,787
QUEENSLAND.(b)								
1932	6,257	3,835	(e) 516,699	3,968,227	(c) 83	£139.02	(c) 1.83	(c) 70,721
1933	6,073	3,620	(e) 517,502	3,944,275	(c) 85	£147.72	(c) 1.82	(c) 70,000
1934	6,236	4,152	(e) 541,238	4,080,906	(c) 87	£130.34	(c) 1.81	(c) 73,204
1935	7,788	4,841	(e) 684,008	4,939,658	(c) 88	£141.30	(c) 1.73	(c) 105,200
1936	6,847	4,589	(e) 615,972	4,411,617	(c) 90	£134.22	(c) 1.72	(c) 94,707
SOUTH AUSTRALIA.								
1932	1,774	2,419	287,619	1,948,293	170	118.37	1.03	113,731
1933	1,758	2,388	283,565	1,924,982	161	118.76	1.03	112,114
1934	1,728	2,142	265,682	1,762,899	154	124.06	1.50	105,044
1935	1,830	2,333	281,068	1,853,188	154	126.50	1.58	111,123
1936	2,039	2,465	312,789	2,027,287	153	126.91	1.50	123,604
WESTERN AUSTRALIA.								
1932	(a) 3,266	2,848	347,492	2,106,129	119	122.03	1.45	82,461
1933	(a) 3,230	2,840	339,007	2,110,065	105	119.37	1.49	79,237
1934	(a) 3,232	2,652	317,870	2,059,813	98	119.85	1.50	73,055
1935	(a) 3,664	2,903	302,252	2,405,046	100	124.77	1.50	83,101
1936	(a) 3,830	2,887	353,011	2,526,619	92	122.29	1.72	80,007
TASMANIA.								
1932	(a) 627	(f) 427	26,690	(f) 215,180	43	62.45	1.93	41,386
1933	(a) 613	(f) 490	27,246	(f) 223,262	44	55.63	1.98	42,248
1934	(a) 637	(f) 540	27,623	(f) 230,597	43	51.17	1.98	42,833
1935	(a) 680	(f) 656	30,671	(f) 236,857	45	46.73	1.86	47,561
1936	(a) 805	(f) 746	37,837	(f) 274,541	47	50.74	1.74	58,672

(a) Includes "Assistant" and "Light" mileage. (b) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line. (c) Approximate. (d) Exclusive of coal, on which way leave charges only were collected. (e) Exclusive of Cooktown, Normanton, and Innisfail and Mourilyan tramways. (f) Exclusive of live stock.

In New South Wales the tonnages of coal on which way leave charges only have been collected were 157,110 tons (1932), 258,893 tons (1933), 297,960 tons (1934), 354,300 tons (1935) and 324,937 tons (1936).

15. **Rolling Stock.**—The following table shows the numbers of rolling stock in use during the years 1932 to 1936. Further details may be found in the Transport and Communication Bulletin No. 27.

RAILWAYS, STATE—ROLLING STOCK.

At 30th June—

State.	1932.			1933.			1934.			1935.			1936.		
	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.
New South Wales ..	1,432	2,713	23,852	1,432	2,710	23,705	1,432	2,676	23,498	1,403	2,657	23,457	1,378	2,704	23,340
Victoria ..	650	2,623	20,979	650	2,526	20,940	619	2,503	20,940	602	2,476	21,004	602	2,450	21,056
Queensland ..	784	1,313	19,151	776	1,329	19,068	776	1,333	18,957	734	1,356	18,774	750	1,381	18,738
South Australia ..	438	670	9,202	438	668	9,144	423	620	9,106	400	611	8,836	365	610	8,720
Western Australia ..	420	493	11,241	420	493	11,250	420	493	11,272	420	493	11,175	420	489	11,096
Tasmania ..	94	224	2,025	94	224	2,025	94	223	2,016	94	225	2,036	92	220	2,045
All States ..	3,818	8,036	86,450	3,810	7,950	86,132	3,764	7,848	85,789	3,653	7,818	85,282	3,607	7,854	84,995

16. **Employees.**—(i) *At 30th June.* The following table gives the number of railway employees in each year from 1932 to 1936 inclusive, classified according to (a) salaried staff, and (b) wages staff :—

RAILWAYS, STATE—EMPLOYEES,(a)

At 30th June—

State.	1932.		1933.		1934.		1935.		1936.	
	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.	Salaried Staff.	Wages Staff.
New South Wales	5,948	34,091	5,724	32,982	5,734	33,068	5,830	35,683	5,888	35,076
Victoria ..	3,720	17,456	3,621	18,159	3,533	17,450	3,499	18,278	3,402	19,053
Queensland ..	2,946	12,461	2,917	12,554	2,948	13,854	3,033	14,305	3,065	14,755
South Australia ..	1,137	5,736	1,148	5,784	1,173	5,563	1,213	5,962	1,280	6,490
Western Australia	1,204	5,671	1,178	6,135	1,205	7,154	1,249	7,064	1,277	7,062
Tasmania ..	174	1,137	166	1,133	179	1,156	171	1,296	175	1,497
All States ..	15,129	76,552	14,754	76,747	14,772	79,145	14,995	82,588	15,087	82,933

(a) Exclusive of construction staff.

In the period under review the totals of salaried and wages staffs increased from 91,681 in 1932 to 98,020 in 1936, a rise of 6.9 per cent.

(ii) *Average staff employed, 1935-36.* The number of employees at one point of time does not afford the best index of employment in railway work. It is considered that the following statement of the average number employed throughout the year indicates more accurately the labour requirements of the railways :—

AVERAGE STAFF EMPLOYED, 1935-36.

State.	Operating Staff.		Construction Staff.		All Employees—Staff.	
	Salaried.	Wages.	Salaried.	Wages.	Salaried.	Wages.
New South Wales ..	5,849	35,930	2	93	5,851	36,023
Victoria ..	3,402	18,997	..	..	3,402	18,997
Queensland ..	3,063	14,063	13	256	3,076	14,319
South Australia ..	1,239	6,144	..	3	1,239	6,147
Western Australia ..	1,262	7,110	10	352	1,272	7,462
Tasmania ..	175	1,497	..	..	175	1,497
All States ..	14,990	83,741	25	704	15,015	84,445

In the State of Victoria, railway construction work is not under the control of the Railways Commissioners. This was also the case in Tasmania until 1935-36, when it was decided to establish a Railway Construction Branch.

17. Accidents.—The following table gives particulars of the number of persons killed and injured through train accidents and the movement of rolling stock on the Government railways in each State for each of the years 1932 to 1936 inclusive:—

RAILWAYS, STATE.—ACCIDENTS.

In year ended 30th June—

State.	1932.		1933.		1934.		1935.		1936.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales	73	308	69	329	53	389	51	421	66	442
Victoria ..	56	227	52	177	49	164	41	121	46	188
Queensland ..	13	124	26	100	21	161	21	143	20	156
South Australia ..	7	104	13	127	11	127	15	119	14	143
Western Australia	23	266	15	236	21	327	13	611	14	383
Tasmania ..	4	16	1	10	1	20	2	22	4	17
All States ..	176	1,045	176	979	156	1,188	143	1,437	164	1,329

Further details relating to the number of passengers, employees and other persons affected by railway accidents are published on page 24 of Transport and Communication Bulletin No. 27.

18. Consumption of Oil and Fuel.—The appended table shows the quantity and value of oil and fuel consumed by the various Government Railway Departments during the year 1935-36:—

GOVERNMENT RAILWAYS.—CONSUMPTION AND VALUE OF OIL AND FUEL, 1935-36.

Government Railways.	Oil.						Coal.		
	Lubricating.			Fuel and Light, etc.					
	Gallons.	Value.	Average Cost per Gallon.	Gallons.	Value.	Average Cost per Gallon.	Tons.	Value.	Average Cost per Ton.
		£	s. d.		£	s. d.		£	£ s. d.
New South Wales	349,783	36,707	2 1	1,186,006	38,263	0 8	1,389,174	820,029	0 11 10
Victoria ..	171,320	15,081	1 9	1,642,606	56,886	0 8	526,349	401,519	0 15 3
Queensland ..	184,205	18,523	2 0	192,594	8,965	0 11	401,706	346,615	0 17 3
South Australia ..	89,228	9,757	2 2	990,833	45,680	0 11	164,407	199,492	1 4 3
Western Australia	77,937	8,298	2 2	322,873	10,624	0 8	324,001	221,031	0 13 8
Tasmania ..	35,736	3,854	2 2	89,670	4,861	1 1	55,497	56,731	1 0 5
Total States ..	908,209	92,220	2 0	4,424,582	165,279	0 9	2,861,134	2,045,417	0 14 4
Federal ..	16,737	1,657	2 0	129,043	5,023	0 9	20,643	39,733	1 9 9
Total, Australia..	924,946	93,887	2 0	4,554,225	170,302	0 9	2,881,777	2,076,150	0 14 5

The range in the average cost per ton of coal from 11s. 10d. in New South Wales to 11s. 9d. per ton for coal used on the Federal Railways is attributable to the comparatively low haulage expenses incurred in the coal-producing States. The average cost of coal during 1935-36 showed a decrease of 0s. 2d. on that for 1934-35.

19. *Passenger Fares and Goods Rates.*—(i) *General.* Fares and rates are changed from time to time to suit the varying necessities of the Railways, and when drought conditions prevail special concessions are made in the rates for the carriage of fodder and water and for the transfer of starving stock to other areas.

All the following particulars have been obtained from the latest Railway publications available relating to Passenger Fares and Coaching Rates and Goods Rates.

(ii) *Passenger Fares.* Two classes are provided for passenger traffic and the fares charged may be grouped as follows:—(a) Fares between specified stations (including suburban fares); (b) Fares computed according to mileage rates; (c) Return, periodical and excursion fares; and (d) Special fares for working men, school pupils, and others. Fares in class (a) are issued at rates lower than the ordinary mileage rates. Fares in class (b) are charged between stations not included in class (a).

The following table shows the single passenger fares for different distances charged in each State and on the Federal Railways between stations for which specific fares are not fixed:—

GOVERNMENT RAILWAYS.—ORDINARY PASSENGER MILEAGE RATES—
SINGLE FARES.

For a Journey of—												
Government Railways.	50 Miles.		100 Miles.		200 Miles.		300 Miles.		400 Miles.		500 Miles.	
	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.
New South Wales ..	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Victoria ..	9 5	6 6	19 1	13 2	35 9	24 8	51 7	35 7	66 8	46 0	75 9	52 3
Queensland ..	10 3	6 10	19 10	13 3	39 8	26 5	55 5	36 11	67 2	44 10	79 0	52 7
South Australia (a) ..	10 9	7 6	20 0	13 0	37 0	24 0	53 0	34 0	68 0	42 0	82 0	50 0
Western Australia ..	..	6 8	..	13 3	..	26 6	..	39 9	..	53 0	..	..
Tasmania ..	8 4	5 3	16 8	10 5	33 4	20 10	50 0	33 3	66 8	41 8	83 4	52 1
Average ..	9 7	6 7	18 9	12 10	36 6	25 0	52 11	36 9	67 2	45 6	80 0	51 9
Average per mile ..	d. 2.30	d. 1.58	d. 2.25	d. 1.54	d. 2.19	d. 1.50	d. 2.12	d. 1.47	d. 2.02	d. 1.37	d. 1.92	d. 1.24
Federal—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Trans-Australian and Central Australia ..	9 7	6 5	19 2	12 9	38 4	25 7	57 6	38 4	70 0	46 8	81 6	54 4
North Australia ..	11 6	7 8	22 11	15 3	45 10	30 7	68 9	45 10	..	..	..	..
Average ..	10 7	7 1	21 1	14 0	41 1	28 1	63 2	42 1	70 0	46 8	81 6	54 4
Average per mile ..	d. 2.54	d. 1.70	d. 2.53	d. 1.68	d. 2.53	d. 1.69	d. 2.53	d. 1.68	d. 2.10	d. 1.40	d. 1.96	d. 1.30

(a) First class tickets are available only on certain lines connecting with the services of other States.

(iii) *Parcel Rates.* Parcels may be transmitted by passenger train at rates based upon weight and distance carried. The charges vary slightly in the different systems. In New South Wales the stamped or prepaid charges range from 5d. for a parcel not exceeding 1 lb. for any distance up to 25 miles to 18s. 8d. for a parcel weighing between 85 and 112 lb. for a distance of 500 miles. In Victoria the corresponding charges are 6d. and 19s. 9d., in Queensland 6d. and 18s. 10d., in South Australia 6d. and 17s. 4d., in Western Australia 6d. and 15s. 6d. (for a parcel between 99 and 112 lb.), in Tasmania

3d. (for a parcel not exceeding 2 lb.) and 10s. 9d. (for a distance of 350 miles), on the Trans-Australian and Central Australia Railways 6d. and 16s., and on the North Australia Railway 6d. (for a parcel not exceeding 3 lb.) and 18s. 4d. (for a distance of 400 miles).

(iv) *Goods Rates.* (a) *General.* In each Railway system there are various classes of rates charged for the conveyance of goods and merchandise. These classes are usually as follows:—*Mileage rates*, based on distance, irrespective of locality; *District rates*, applicable only between specified places; *Local rates*, charged on lines in respect of which it is provided that the rates charged thereon shall be as though such lines were separate from other lines; *Commodity rates*, applicable only in respect of specified articles; *Package rates*, applicable only to single packages of specified descriptions; *Through rates*, applicable to goods carried by rail and another method of transport or by railways controlled by several authorities; and *Special rates*, other than those before mentioned.

Freight itself is generally divided according to a number of different classes (e.g., in New South Wales the classes are Manure, Coal, Miscellaneous, "A," "B," "C," 1st and 2nd), but as limitations of space forbid a detailed analysis of the rate applicable to each class, the following table gives particulars of highest and lowest class freights only. Generally, the highest class freight includes expensive, bulky, or fragile articles, while the lowest class comprises many ordinary articles of merchandise, particularly those identified or connected with the primary industries.

(b) *Highest and Lowest Class Freights.* The ordinary mileage rates charged per ton for hauls of different distances in respect of (a) the highest-class freight and (b) the lowest-class freight are given hereunder:—

GOVERNMENT RAILWAYS.—HIGHEST AND LOWEST CLASS ORDINARY FREIGHT MILEAGE RATES.

Charge per Ton for a Haul of—

Government Railways.	50 Miles.	100 Miles.	200 Miles.	300 Miles.	400 Miles.	500 Miles.	500 Miles.	1,000 Miles.	1,500 Miles.	2,000 Miles.	3,000 Miles.	4,000 Miles.	5,000 Miles.
Highest Class Freight.							Lowest Class Freight.						
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
New South Wales ..	39 2	76	8 130 10	160 0	180 0	197 6	5 0	6 9	8 5	10 0	11 3	12 4	
Victoria ..	33 6	65	0 122 3	167 3	205 6	244 3	3 8	5 7	8 3	11 0	12 3	13 4	
Queensland ..	60 0	101	8 180 0	248 4	286 8	301 8	5 0	5 6	10 0	12 0	13 6	15 0	
			(a)	(b)	(a)	(b)							
South Australia ..	36 9	67 4	121 9	170 6	214 0	252 1	5 9	10 1	17 1	19 2	19 2	19 2	
Western Australia ..	31 4	58	9 103 0	140 2	170 7	195 8	3 3	4 1	6 2	8 3	10 4	12 5	
Tasmania ..	38 2	71	6 129 10	186 1	..	..	6 2	10 10	14 2	15 10	..	..
Average ..	39 10	73 6	131 3	178 9	211 4	238 3	4 10	7 2	10 8	12 9	13 4	14 5	
Average per mile ..	9.56	8.82	7.88	7.15	6.34	5.48	1.16	0.86	0.64	0.51	0.40	0.35	
Federal—													
Trans - Australian, Central Australia and North Australia ..	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
	40 10	78 0	145 11	200 2	247 10	288 6	4 6	8 1	13 10	16 7	18 10	21 1	
Average per mile ..	9.80	9.36	8.76	8.01	7.44	6.92	1.08	0.97	0.83	0.66	0.57	0.51	

(a) Maximum rate on highest class goods sent to the Western lines from Brisbane, Rockhampton or Townsville up to 500 miles is 236s. 8d. per ton. (b) Rates from stations south of Yandaran and Monto to stations north and west of Rockhampton, and *vice versa*, 291s. 8d. (400 miles) and 336s. 8d. (500 miles) per ton, provided that they are not more than the sum of the local rates to and from Rockhampton.

NOTE.—A preliminary Summary of the Operations of all Government Railways for the year 1936-37 will be found in the Appendix to this volume.

§ 4. Private Railways.

1. **Total Mileage Open, 1935-36.**—The bulk of the private railways in Australia have been laid down for the purpose of hauling timber, firewood, sugar-cane, coal, or other minerals, and they are not generally used for the conveyance of passengers or for public traffic. In many cases the lines are practically unballasted and easily removable.

The railways referred to in this section include only lines open to the public for general passenger and goods traffic. Complete particulars of lines used for special purposes only for the year 1935-36 are not available.

2. **Lines Open for General Traffic.**—The following statement gives a summary of the operations of private railways open for general traffic for the year 1935-36 :—

RAILWAYS, PRIVATE.—SUMMARY, 1935-36.

State.	Companies from which returns were received.	Miles Open (Route).	Capital Cost.	Gross Revenue.	Working Expenses.	Train-Miles.	Passenger Journeys.	Tonnage of Goods, etc.	Number of Employees.	Rolling Stock.		
										Locos.	Coaches.	Other Vehicles.
	No.	Miles.	£	£	£	Miles.	No.	Tons.	No.	No.	No.	No.
New South Wales (b) . .	6	80.45	1,278,207	352,712	190,430	543,429	1,197,560	1,315,149	424	65	1	726
Victoria (b) . .	2	24.94	81,384	9,530	9,709	25,344	9,581	37,857	19	5	4	36
Queensland (b) . .	12	246.15	528,979	37,015	31,611	97,346	3,953	231,568	72	17	10	451
South Australia (b) . .	1	50.51	(a)	(a)	(a)	99,813	239	1,766,409	38	7	1	235
Western Australia (b) . .	1	277.00	2,246,751	161,372	74,834	276,858	27,848	116,270	291	23	23	524
Tasmania (b) . .	3	131.57	898,595	128,205	99,912	203,488	49,700	179,404	264	20	20	305
All States (b) . .	25	810.62	5,033,916	688,834	406,496	1,246,278	1,288,881	3,646,657	1,108	137	59	2,277

(a) Not available.

(b) Incomplete.

The particulars given in the table are incomplete in respect of the States of New South Wales, Queensland, South Australia and Tasmania. In New South Wales and Queensland several of these lines, although owned by private companies, are operated by the Government Railway Departments, and Government rolling stock is used thereon. In some cases the figures relating to tonnage of goods, etc., include particulars of coal, ores, timber, sugar cane, etc., carried for private purposes.

C. TRAMWAYS.

1. **Systems in Operation.**—(i) *General.* Tramway systems are in operation in all the States, and in recent years considerable extension has been made in the use of electrical traction, the benefit of which is now enjoyed in a number of the larger towns.

In many parts of Australia private lines used for special purposes in connexion with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways (*see above*), and the traffic on them has nothing in common with that of the street tramways for the conveyance of passengers, which are dealt with in the present section.

(ii) *Total Mileage Open and Classification of Lines.* The following tables show for each State the total mileage of tramway lines open for general passenger traffic for the

year 1935-36, classified (a) according to the controlling authority, (b) according to the motive power used, and (c) according to gauge; and for Australia according to motive power for the years 1931-32 to 1935-36:—

TRAMWAYS.—ROUTE MILEAGE OPEN, 1935-36.

Controlling Authority, Nature of Motive Power, and Gauge.	N.S. Wales.	Victoria.	Q'land.	South Australia.	Western Australia.	Tasmania.	Total Australia
ACCORDING TO CONTROLLING AUTHORITY.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Government ..	188.05	176.70	..	..	52.74	..	417.49
Municipal ..	..	..	64.83	76.11	9.98	28.43	179.35
Private ..	3.50	..	..	..	11.56	..	15.06
Total ..	191.55	176.70	64.83	76.11	74.28	28.43	611.90

ACCORDING TO MOTIVE POWER.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Electric ..	182.49	160.00	58.18	76.11	65.43	28.43	570.64
Steam and Petrol ..	9.06	..	6.65	..	6.34	..	22.05
Cable ..	..	16.70	..	..	..	..	16.70
Horse ..	..	..	..	..	2.51	..	2.51
Total ..	191.55	176.70	64.83	76.11	74.28	28.43	611.90

ACCORDING TO GAUGE.							
Gauge—							
5 ft. 3 in. ..	..	5.18	..	..	..	..	5.18
4 ft. 8½ in. ..	191.55	171.52	58.18	76.11	..	..	497.36
3 ft. 6 in. ..	..	..	6.65	..	74.28	28.43	109.36
Total ..	191.55	176.70	64.83	76.11	74.28	28.43	611.90

Further details on this subject may be obtained from page 27 of Transport and Communication Bulletin No. 27.

TRAMWAYS.—ROUTE MILEAGE OPEN, AUSTRALIA.

Nature of Motive Power.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
ACCORDING TO MOTIVE POWER.					
	Miles.	Miles.	Miles.	Miles.	Miles.
Electric ..	574.59	571.87	573.59	570.46	570.64
Steam and Petrol ..	21.97	21.97	21.81	21.81	22.05
Cable ..	24.29	24.29	24.29	24.29	16.70
Horse ..	1.50	1.50	2.51	2.51	2.51
Total ..	622.35	619.63	622.20	619.07	611.90

(iii) *Cost of Construction and Equipment.* The table hereunder shows the total cost of construction and equipment of all tramways to the 30th June, 1936, classified according to the nature of the motive power. Further details relating to controlling authorities are available on page 27 of Transport and Communication Bulletin No. 27.

TRAMWAYS.—COST OF CONSTRUCTION AND EQUIPMENT, 1935-36.

Nature of Motive Power.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
Electric	8,752,476	7,869,053	2,206,232	4,209,473	1,748,386	642,409	25,428,029
Steam and Petrol	123,313	..	53,235	..	64,556	..	241,104
Cable ..	..	974,293	..	..	..	..	974,293
Horse ..	..	..	..	..	10,104	..	10,104
Total ..	8,875,789	8,843,346	2,259,467	4,209,473	1,823,046	642,409	26,653,530

ACCORDING TO MOTIVE POWER.

	£	£	£	£	£	£	£
Electric	8,752,476	7,869,053	2,206,232	4,209,473	1,748,386	642,409	25,428,029
Steam and Petrol	123,313	..	53,235	..	64,556	..	241,104
Cable ..	..	974,293	..	..	..	..	974,293
Horse ..	..	..	..	..	10,104	..	10,104
Total ..	8,875,789	8,843,346	2,259,467	4,209,473	1,823,046	642,409	26,653,530

2. New South Wales.—(i) *General.* With the exception of a steam tramway $3\frac{1}{2}$ miles in length from Parramatta to Duck River, which is operated by Sydney Ferries Ltd., the tramways of New South Wales are the property of the Government, and are under the control of the Department of Road Transport and Tramways. In Sydney and suburbs the Government tramways are divided into six distinct systems, five of which are operated by electricity, and one, the Kogarah to Sans Souci line, by steam. The Kogarah to Sans Souci steam trams are to be replaced in the near future by trolley buses. The gauge of all lines is 4 ft. 8 $\frac{1}{2}$ in.

(ii) *Particulars of Working.—Electric and Steam Tramways.* The following table gives a summary of the operations of all tramways for the years 1932 to 1936:—

ELECTRIC AND STEAM TRAMWAYS.—NEW SOUTH WALES.—SUMMARY.

Year ended 30th June—	Mileage Open for Traffic (Route).	Total Cost of Construction and Equipment.	Gross Revenue.	Working Expenses.	Net Earnings.	Interest.	Percentage of Working Expenses on Gross Revenue.	Percentage of Net Earnings on Capital Cost.	Passengers carried.	Persons employed at end of year.
	Miles.	£	£	£	£	£	%	%	No. 000.	No.
1932 ..	197.57	8,155,204	3,306,557	3,049,267	257,290	546,626	92.22	3.15	286,504	8,417
1933 ..	197.47	8,204,065	3,268,200	2,781,968	486,231	484,057	85.12	5.03	295,783	8,033
1934 ..	194.49	8,410,973	3,232,090	2,745,048	486,988	485,986	78.25	8.48	295,530	7,922
1935 ..	191.20	8,937,416	3,323,498	2,717,383	606,115	442,995	81.76	6.78	307,610	8,112
1936 ..	191.55	8,875,789	3,390,443	2,686,295	704,148	427,919	70.23	7.93	314,065	8,224

(n) Exclusive of £189,730 for depreciation charges on electric tramways, previously included.

3. **Victoria.**—(i) *General.* In Melbourne, electric and cable tramway systems with route mileages of 120.41 miles and 106.70 miles respectively are worked by the Melbourne and Metropolitan Tramways Board, while two electric tramways, (a) St. Kilda to Brighton 5.18 miles and (b) Sandringham to Black Rock 2.43 miles, belong to and are operated by the Railways Commissioners. The State Electricity Commission operates 10.08 miles of electric tramways at Geelong, acquired from the Melbourne Electric Supply Company on the 1st September, 1930, and 13.14 miles of similar traction at Ballarat and 7.86 miles at Bendigo, taken over from the Electric Supply Company of Victoria on 1st July, 1934. The Melbourne cable trams are being gradually replaced by electric trams.

A short account of the formation of the Melbourne Tramway and Omnibus Company and of the Tramways Board will be found in earlier issues of this work (*see Year Books No. 7 page 652, No. 9 page 679 and No. 15 page 593*).

With the exception of the St. Kilda-Brighton line, which is of 5 ft. 3 in. gauge, all the tramways of the State are of 4 ft. 8½ in. gauge.

(ii) *Particulars of Working.*—*Electric and Cable Tramways.* The following table gives particulars for all tramways in Victoria during each of the years 1932 to 1936 inclusive :—

ELECTRIC AND CABLE TRAMWAYS.—VICTORIA.—SUMMARY.

Year ended 30th June—	Mileage Open for Traffic (Route).	Total Cost of Construction and Equipment.	Gross Revenue.	Working Expenses.	Net Earnings.	Interest.	Percentage of Working Expenses on Gross Revenue.	Percentage of Net Earnings on Capital Cost.	Passengers carried.	Persons employed at end of year.
	Miles.	£	£	£	£	£	%	%	No. ,000.	No.
1932 ..	178.67	8,644,770	2,049,698	1,327,161	722,537	326,250	64.75	8.36	175,433	4,740
1933 ..	178.67	8,600,453	2,058,241	1,285,984	772,257	325,412	62.48	8.98	176,917	4,732
1934 ..	178.77	8,562,299	2,088,716	1,306,301	782,415	300,015	62.54	9.14	179,779	4,870
1935 ..	178.40	8,444,725	2,163,738	1,311,587	822,151	293,136	62.00	9.74	186,184	4,995
1936 ..	176.70	8,843,346a	2,182,952	1,326,013	856,939	277,328	60.74	9.69	186,800	5,003

(a) Including figures relating to cost of items not previously included.

4. **Queensland.**—(i) *General.* The electric tramways in the city and suburbs of Brisbane were controlled by a private company, with head office in London, until the 31st December, 1922, on which date they were purchased by the Queensland Government which, under the provisions of the Brisbane Tramway Trust Act 1922, appointed a Trust to control and operate the system until 1st December, 1925, when the control passed to the Brisbane City Council. Under the provisions of the Brisbane City Council Act 1925, the Council took over the liabilities of the Tramway Trust to the extent of £2,000,000 which had been incurred in London, and assumed complete control of the system. The total length of the Brisbane tramways was 58.18 route miles at 30th June, 1936, the gauge of the line being 4 ft. 8½ in.

In addition to the electric tramways, a steam tramway operated by the City Council is in operation at Rockhampton. The length of line is 6.65 route miles and the gauge 3 ft. 6 in.

(ii) *Particulars of Working.—Electric and Steam Tramways.* The following table gives particulars of the working of all tramways in Queensland for each year from 1932 to 1936 :—

ELECTRIC AND STEAM TRAMWAYS.—QUEENSLAND.—SUMMARY.

Year ended 31st December—	Mileage Open for Traffic (Route)	Total Cost of Construction and Equipment.	Gross Revenue.	Working Expenses.	Net Earnings.	In-terest.	Per-centage of Working Expenses on Gross Revenue.	Per-centage of Net Earnings on Capital Cost.	Passen-gers carried.	Persons employed at end of year.
	Miles.	£	£	£	£	£	%	%	No. ,000.	No.
1932 ..	63.51	2,195,545	688,883	481,186	207,697	106,689	69.85	9.46	69,478	1,431
1933 (a)	63.51	2,162,031	694,611	479,426	215,185	106,651	69.02	9.95	69,646	1,359
1934 (a)	63.51	2,115,469	700,723	501,846	108,877	106,611	71.62	9.40	71,185	1,485
1935 (a)	64.18	2,161,118	746,543	543,571	202,972	106,533	72.81	9.39	78,264	1,735
1936 (a)	64.83	2,259,467	784,779	587,296	197,483	106,457	74.84	8.74	83,781	1,740

(a) Year ended 30th June.

5. *South Australia.—(i) General.* The tramways in Adelaide and suburbs are controlled by a Municipal Tramways Trust created in 1907. Prior to that year, the system was run with horse-traction by several private companies. Electric traction was inaugurated in 1909, and at the 31st July, 1936, the Tramways Trust operated a total route mileage of 76.11 miles of 4 ft. 8½ in. gauge. This is exclusive of a motor bus route mileage of 21.69, although the remaining items in the following table relate to the operations of both trams and buses, separate figures not being available.

(ii) *Particulars of Working.—Electric Tramways.* The following table gives particulars of the working of electric tramways in Adelaide for each year from 1932 to 1936 :—

ELECTRIC TRAMWAYS.—ADELAIDE.—SUMMARY.

Year ended 31st July—	Mileage Open for Traffic (Route).	Total Cost of Construction and Equipment.	Gross Revenue.	Working Expenses.	Net Earnings.	In-terest.	Per-centage of Working Expenses on Gross Revenue.	Per-centage of Net Earnings on Capital Cost.	Passen-gers carried.	Persons employed at end of year.
	Miles.	£	£	£	£	£	%	%	No. ,000.	No.
1932 ..	82.84	4,043,913	659,575	383,400	276,175	264,597	58.13	6.83	48,467	1,777
1933 ..	82.83	4,068,156	643,274	392,526	250,748	253,930	61.02	6.16	48,154	1,719
1934 ..	82.83	4,072,007	627,897	388,136	239,761	248,760	61.82	5.89	47,021	1,708
1935 ..	82.83	4,077,349	639,335	402,258	237,077	239,139	62.92	5.81	48,118	1,688
1936 ..	76.11	4,209,473	673,737	437,693	236,044	231,843	64.96	5.61	50,625	1,688

6. *Western Australia.—(i) General.* The Perth electric tramways were opened for traffic by a private company on the 24th September, 1899, and the system was subsequently extended to many of the suburbs. Control was taken over by the Government on the 1st July, 1913, and the tramways are now worked in conjunction with the Government railways. The length of line open at 30th June, 1936, was 43.80 route miles. Electric tramways with a route mileage at 31st August, 1936, of 9.98 miles and controlled by the municipal authorities, are in operation in Fremantle. In

Kalgoorlie and Boulder a private company controls the electric tramways, of which at the end of 1936, the length of line was 11.56 route miles. All the electric tramways of the State are of 3 ft. 6 in. gauge.

In addition to the electric tramways, there are several tramways, other than electric, with a total length of 8.85 miles of 3 ft. 6 in. gauge. The lines are under control of the Department of Works and Labour, and the total mileage of 8.85 miles is made up of several short lengths worked by steam, petrol or horses in connexion with the jetties at certain ports and providing communication between the jetties and the goods sheds or warehouses.

(ii) *Particulars of Working.—All Tramways.* The following table gives a summary for all tramways in the State for the years 1932 to 1936 :—

ELECTRIC, STEAM AND HORSE TRAMWAYS.—WESTERN AUSTRALIA.—SUMMARY.

Year ended 30th June—	Mileage Open for Traffic (Route).	Total Cost of Construction and Equip-ment.	Gross Revenue.	Working Expenses.	Net Earn-ings.	In-terest. (a)	Per-centage of Work-ing Expen-ses on Gross Re-venue.	Per-centage of Net Earn-ings on Capital Cost.	Passen-gers carried.	Persons em-ployed at end of year.
	Miles.	£	£	£	£	£	%	%	No. ,000.	No.
1932 ..	69.03	1,793,651	359,080	288,098	70,982	55,480	80.23	3.96	36,133	761
1933 ..	68.84	1,802,831	354,321	290,448	63,873	55,426	81.97	3.54	36,329	741
1934 ..	74.17	1,818,775	354,552	297,367	57,185	56,347	83.87	3.14	36,595	773
1935 ..	74.05	1,811,856	360,490	291,966	68,524	55,261	80.99	3.78	37,108	737
1936 ..	74.28	1,823,046	362,104	298,416	63,688	54,734	82.41	3.49	38,135	753

(a) Exclusive of Kalgoorlie and Boulder electric tramways operated by a private company.

7. *Tasmania.*—(i) *General.* In Hobart there is a system of electric tramways consisting of 16.70 route miles of 3 ft. 6 in. gauge controlled by the Hobart Municipal Council. The Launceston City Council operates a length of 11.73 miles of 3 ft. 6 in. gauge in that City.

(ii) *Particulars of Working.—Electric Tramways.*—The following table gives a summary of the working of the two electric systems for the years 1932 to 1936 :—

ELECTRIC TRAMWAYS.—TASMANIA.—SUMMARY.

Year ended 30th June—	Mileage Open for Traffic (Route).	Total Cost of Construction and Equip-ment.	Gross Revenue.	Working Expenses.	Net Earn-ings.	In-terest.	Per-centage of Work-ing Expen-ses on Gross Re-venue.	Per-centage of Net Earn-ings on Capital Cost.	Passen-gers carried.	Persons em-ployed at end of year.
	Miles.	£	£	£	£	£	%	%	No. ,000.	No.
1932 ..	30.73	628,794	154,812	115,096	39,716	41,485	74.34	6.32	15,493	353
1933 ..	28.31	630,657	161,902	116,112	45,790	42,726	71.72	7.26	14,850	291
1934 ..	28.43	634,192	164,826	123,998	40,828	36,376	75.23	6.44	14,942	308
1935 ..	28.41	635,535	164,639	121,883	42,756	39,055	74.03	6.73	14,934	305
1936 ..	28.43	642,409	173,079	127,887	45,192	37,016	73.89	7.03	14,717	304

8. *Australia.—All Tramways—Summary 1932 to 1936.* The following table gives a summary of the working of all tramway systems in Australia for the years 1932 to 1936:—

ALL TRAMWAYS—AUSTRALIA—SUMMARY.

Particulars.	1932.	1933.	1934.	1935.	1936.
Mileage open for traffic .. Miles	622.35	619.63	622.20	619.07	611.90
Cost of Construction and Equipment £	25,461,877	25,468,793	25,613,720	26,067,999	26,653,530
Cost per mile £	40,912	41,103	41,166	42,108	43,559
Gross Revenue £	7,218,005	7,180,549	7,176,410	7,397,243	7,187,094
Working Expenses £	5,644,208	5,346,404	5,182,080	5,418,648	5,413,060
Net Earnings £	1,574,397	1,834,085	2,023,724	1,979,595	2,103,494
Interest £	1,341,127	1,268,202	1,204,095	1,166,020	1,145,297
Percentage of Working Expenses on Gross Revenue %	78.19	74.46	71.80	73.24	72.20
Percentage of Net Earnings on Capital Cost %	6.18	7.20	7.90	7.59	7.89
Tram-miles run .. ,000 miles	79,963	80,910	80,757	81,084	81,481
Gross revenue per tram mile .. d.	21.66	21.30	21.33	21.90	22.29
Working expenses per tram mile .. d.	16.94	15.86	15.31	16.04	16.09
Net earnings per tram mile .. d.	4.72	5.44	6.01	5.86	6.20
Passengers carried .. ,000	631,508	641,680	646,161	672,523	688,123
Passengers carried per tram mile .. No.	7.90	7.93	8.00	8.29	8.45
Average revenue per passenger journey d.	2.74	2.69	2.67	2.64	2.64
Persons employed at end of year .. No.	17,479	16,875	17,066	17,572	17,712

D. AVIATION.

1. *Historical.*—A short review of the progress of civil aviation in Australia up to the date of foundation of the Department of Civil Aviation was given in Official Year Book No. 16, pp. 334-5.

2. *Foundation of Civil Aviation Administration.*—A brief account of the foundation and objects of this Department will be found in Official Year Book No. 19, p. 299. In 1936 the organization was changed and the responsibility of regulating and controlling Civil Aviation in the Commonwealth was entrusted to a Board, consisting of four members and a secretary. The Chairman is the Controller-General of Civil Aviation, whilst the other three members are the Controller of Operations, the Controller of Ground Organization and the Finance Member. The Board has remained a branch of the Defence Department.

3. *Aerodromes and Landing Grounds.*—Landing grounds have been established over the following approved routes:—Perth to Wyndham (2,067 miles); Perth to Adelaide (1,453 miles); Adelaide to Sydney (790 miles); Sydney to Brisbane (500 miles); Brisbane to Camooweal (1,226 miles); Camooweal to Darwin (802 miles); Katherine to Ord River (375 miles); Cloncurry to Normanton (216 miles); Melbourne to Hobart, via King Island (490 miles) and via Flinders Island (436 miles); Melbourne to Hay (233 miles); Mildura to Broken Hill (189 miles); Melbourne to Charleville, via Cootamundra (900 miles).

During the year 1936-37 action has been proceeding to make suitable for night flying the air routes linking the capital cities. The first sections to be prepared will be Brisbane-Sydney-Melbourne-Adelaide. Steps are being taken to improve existing landing grounds, to prepare additional grounds, and to provide the necessary lighting facilities which include airway rotating beacons at intervals along the air routes and a complete system of illuminating and flood lighting the various landing grounds.

The Longreach-Cloncurry section of the Brisbane-Darwin air mail route has been equipped for night flying, which permits flying at night over this section of the route when necessary in order to maintain schedule. The Kalgoorlie-Cook section of the Perth-Adelaide air route is also equipped for night flying.

Up to the 30th April, 1937, 242 landing grounds had been acquired or leased and prepared by the Commonwealth Government for civil aviation purposes. In addition to landing grounds established and maintained by the Commonwealth Government, considerable activity is being displayed by local governing authorities in the establishment of public aerodromes. The Civil Aviation Board assists local authorities desirous

of establishing aerodromes by giving technical advice regarding the suitability of proposed sites and the preparation of approved areas to comply with Departmental requirements. At the 30th April, 1937, there were 202 licensed public aerodromes under the control of local authorities. The total number of recognized landing grounds in Australia and New Guinea at the 30th April, 1937, was 444.

4. *General Flying Activities, 1936.*—The mileage flown by all civil aircraft in Australia and New Guinea in 1936 was approximately 8,464,405 and there were six fatal accidents. During 1936, 1,972,616 miles were flown by the subsidized air services without injuries to passengers or crews. There was one fatal accident on other regular services which flew 2,360,254 miles.

5. *Air Services.*—(i) *General.* Since the year 1920 the grant of financial assistance for the establishment and maintenance of regular air transport services has been part of the Government's policy for the development of civil aviation in Australia.

At the 30th April, 1937, nine subsidized contractors were operating under contracts which provided that such space as is required on each trip must be reserved for mails. On letters within the Commonwealth there is an air mail fee of 3d. per $\frac{1}{2}$ ounce in addition to the ordinary postage rate, and for letters to the United Kingdom the inclusive postage is 1s. 6d. per $\frac{1}{2}$ ounce. The total route mileage of these services is 11,766 miles.

The principal service is that from Brisbane to Darwin, and thence through Netherlands East Indies to Singapore, where a junction is made with Imperial Airways Ltd., which maintains regular air communication with the United Kingdom. In consequence of the growth of passenger and mail traffic over this route the Government decided to increase the frequency of the service to twice weekly as from May, 1936, and similarly to branch lines Daly Waters-Perth and Charleville-Cootamundra. The importation of high speed modern American aircraft during the year also led to increased frequency of services between the mainland and Tasmania and to the duplication of the Adelaide-Perth service. The employment of Douglas aircraft on the latter route has enabled journeys between the two capitals to be effected comfortably in one day.

The past year has been notable for the formation and expansion of Australian National Airways Pty. Ltd., which came into being with the merging of the interests of Holyman's Airways Pty. Ltd. and Adelaide Airways Ltd., and it subsequently purchased the assets of West Australian Airways Ltd. which has operated the Perth-Adelaide service since 1929. The Company is now the largest Civil Aviation organization in the Commonwealth with a staff of some 160 persons, including 37 pilots, and 25 aircraft. It operates in all States except Queensland and maintains regular air services over approximately 5,000 miles of air routes. The Company contemplates a further extension of its activities during 1937 and has on order from America several additional Douglas aircraft.

After protracted negotiations between the United Kingdom and the Commonwealth Governments agreement has been reached in regard to the Empire Air Mail Scheme. Briefly, the scheme envisages the carriage of first class mails between Great Britain and the Dominions by large flying boats, but the Commonwealth Government has decided that only surcharged mail shall be despatched from Australia by the service. The Commonwealth Government will directly control the section from Singapore to Sydney (the Australian terminus) which will be operated by Qantas Empire Airways Ltd., under contract to the Commonwealth Government. It is expected that the Australian service will be inaugurated early in 1938 with a frequency of at least twice weekly in each direction. The probable route south from Darwin will be overland to Groote Eylandt in the Gulf of Carpentaria, thence to Karumba (near Normanton), across country to Townsville and thence along the eastern coast to Sydney. The present inclusive rate of 1s. 6d. per $\frac{1}{2}$ ounce will be reduced to 5d. per $\frac{1}{2}$ ounce for outward mail.

All pilots and mechanics employed on the regular subsidized air transport services must join the Air Force Reserve when called upon.

(ii) *Regular Air Services at 30th April, 1937.* These services are of three categories, viz.:—(a) subsidized services carrying passengers, mails and freight; (b) unsubsidized services carrying mails (under agreement with the Postmaster-General's Department), passengers and freight; and (c) unsubsidized services carrying passengers and freight.

The aggregate route mileage of all operating companies is 21,588, whilst the total distance of routes over which regular services operate is 18,858. The difference between these two totals is explained by the fact that over some routes more than one company maintains a regular service, as, for instance, along the Queensland coast. The weekly mileage of all regular services is 113,397. The air routes are shown on the map herein.

The latter figure will be considerably augmented during 1937 with the inauguration of a weekly return service between Sydney and New Guinea (which has been authorized by the Government) and by other services likely to be established. The frequencies of the following services vary from once weekly to twice daily.

(a) *Subsidized Services.*—Qantas Empire Airways Ltd.—Brisbane-Darwin-Singapore, 4,361 miles; Cloncurry-Normanton, 216 miles. MacRobertson-Miller Aviation Co. Ltd.—Perth-Daly Waters, 2,252 miles; Ord River-Wyndham, 154 miles. Butler Air Transport Co.—Cootamundra-Charleville, 629 miles. Australian National Airways Pty. Ltd.—Melbourne-Launceston (non-stop), 314 miles; Launceston-Hobart, 94 miles; Melbourne-King Island-Launceston, 390 miles; Launceston-Flinders Island, 109 miles; Perth-Adelaide, 1,453 miles. Aircrafts Pty. Ltd.—Brisbane-Cracow, 250 miles. Airlines of Australia Ltd.—Rockhampton-Mount Coolon, 330 miles. Commercial Aviation Co. Ltd.—Adelaide-Whyalla, 150 miles. Adastra Airways Ltd.—Sydney-Bega, 205 miles. Airlines (W.A.) Ltd.—Perth-Wiluna-Kalgoorlie, 813 miles.

(b) *Unsubsidized (Mail) Services.* Australian National Airways Pty. Ltd.—Melbourne-Sydney, via Canberra and via Wagga, 490 miles; Adelaide-Melbourne, 468 miles; Adelaide-Broken Hill via Renmark and Mildura, 383 miles; Adelaide-Broken Hill-Mildura-Adelaide (round trip), 638 miles; Adelaide-Cowell-Port Lincoln-Adelaide (round trip), 372 miles; Adelaide-Kangaroo Island, 95 miles. Airlines of Australia Ltd.—Sydney-Brisbane, 500 miles; Brisbane-Townsville, 711 miles. North Queensland Airways Pty. Ltd.—Townsville-Cairns-Cooktown, 290 miles; Cairns-Normanton, 350 miles. Ansett Airways Pty. Ltd.—Melbourne-Hamilton, 160 miles. Victorian & Interstate Airways Ltd.—Melbourne-Hay, 233 miles. Intercity Airways—Sydney-Broken Hill, 635 miles. Guinea Airways Ltd.—Adelaide-Darwin, 1,730 miles.

(c) *Unsubsidized Services.* Airlines of Australia Ltd.—Brisbane-Rockhampton, 325 miles; Brisbane-Toowoomba, 75 miles; Townsville-Cairns, 190 miles; Townsville-Mount Isa, 537 miles; Sydney-Newcastle, 80 miles. Aircrafts Pty. Ltd.—Brisbane-Bundaberg, 200 miles; Brisbane-Rockhampton-Monto-Brisbane, 663 miles. Qantas Empire Airways Ltd.—Longreach-Charleville, 267 miles; Longreach-Rockhampton, 470 miles.

(d) *Air Ambulance Services.* The first air ambulance service in Australia was established in 1928 when an arrangement was entered into between the Queensland and Northern Territory Aerial Services Ltd. (now Qantas Empire Airways Ltd.) and the Australian Inland Mission. The company provides the aircraft and pilot, and the mission authorities provide the doctor. The base of operations is Cloncurry whence flights are made as required into Western and Northern Queensland. The scheme has continued to prove most successful, and many instances are recorded of lives being saved by the services thus made available. A notable feature in this work is the part played by wireless communication, consequent on the introduction of pedal transceivers. The power for these small wireless units is supplied by a dynamo operated by bicycle pedals, and morse messages may be sent out by manipulating an automatic keyboard transmitter like a typewriter. Up to about 200 miles, however, telephony may be used. By this means settlers in outlying districts may call the "flying doctor" and obtain his advice or, if necessary, request the air ambulance.

The "flying doctor" scheme has been extended to Western Australia. From the Wyndham base the service is maintained by the MacRobertson-Miller Aviation Co., which employs a D.H.83 aircraft specially fitted for ambulance work. This aircraft is employed on the regular Ord River-Wyndham air service, and is available for Australian Aerial Medical Service as required. The Victorian Section of the Australian Aerial Medical Service, with the aid of a small Commonwealth monetary grant, provides

a doctor and bears the cost of flying operations in this district. A further air ambulance is also available at Port Hedland, Western Australia, under the joint management of the MacRobertson-Miller Aviation Company and the Western Australian section of the Australian Aerial Medical Service. At Kalgoorlie similar work is undertaken by a local aircraft owner.

The outback districts of North Australia also have the benefit of a "flying doctor", as the Commonwealth Medical Officer at Katherine is a licensed pilot, and, by arrangement with the Government, he uses his aeroplane to visit patients at distant isolated centres.

With the assistance of a small Governmental subsidy the Far West (New South Wales) Children's Health Scheme maintains an "Aerial Baby Health Clinic" at Bourke and surrounding district. An aeroplane is chartered from a local owner, and is used for the conveyance of the clinic's nurse who interviews mothers and gives lectures at the centres visited. To facilitate its work, the clinic (with the aid of financial assistance from the New South Wales Government) has had aerodromes prepared in the territory over which periodical flights are carried out.

The Commonwealth Government recognizes the national importance and the incalculable benefits to "outback" settlers of this form of medical aid, and has decided to make available an annual grant of £5,000 towards the maintenance and extension of air ambulance services. The allocation of this money is made upon the recommendations of a committee representing the Health, the Postmaster-General's and the Civil Aviation Administrations.

6. **Gliding.**—Activities are carried out in various centres of the Commonwealth, but the sport is confined chiefly to Perth, Queensland and Melbourne, where local bodies are assisted in their operations by a small Governmental grant.

7. **Meteorological Aids to Aviation.**—Close co-operation exists between the meteorological authorities and aviation interests, with mutual advantage. Certain of the air transport companies operating regular services compile for the meteorological authorities logs of the weather conditions along their routes. In return, aviation interests obtain from the Weather Bureau regular weather reports and forecasts for the main air routes, while special information may be had at any time on request. Civil Aviation authorities have also made available special apparatus for upper air observations, and special observation flights have been conducted over a long period by the Royal Australian Air Force at Point Cook.

A meteorological station has been erected at Darwin, and regular weather forecasts and reports are supplied to Qantas Empire Airways Ltd. and the MacRobertson-Miller Aviation Company to facilitate the operation of the air services in North Australia, and across the Timor Sea. The information supplied includes upper air observations at Darwin.

Weather reports from Darwin are transmitted by Amalgamated Wireless (A. Asia.) Ltd. which maintains a continuous W/T. watch over the movements of aircraft. The meteorological office at Darwin is thus enabled to keep in touch with the aircraft crossing the Timor Sea, and furnish up to date advice of weather conditions.

In June, 1935, agreement was reached between the Commonwealth Government and the Netherlands East Indies authorities for the free interchange of weather reports for the use of air services operating between Darwin and Singapore. Reports of the weather conditions at a number of centres in Netherlands East Indies are broadcast from Koepang (Timor) at 9.30 a.m. daily, the broadcast including also particulars of upper air observations at Koepang. Similarly, reports in respect of Darwin, Daly Waters, Wyndham, Broome and Port Hedland are broadcast from Darwin at 12.30 p.m. daily.

A considerable extension of meteorological aids for aviation has been decided on. The new scheme provides for the establishment of meteorological field units at terminal aerodromes and at other selected intermediate aerodromes along the principal air routes. Meteorological officers will be in touch with the control officers at each aerodrome, who will receive and transmit weather information to the pilots in flight through radio stations

at the aerodromes. The improved arrangements are to be introduced first on air routes between Brisbane, Sydney, Melbourne and Hobart and between Melbourne and Adelaide. Subsequent extensions will include Perth and a number of tropical stations in preparation for the Empire Flying Boat Service and the Sydney-New Guinea air routes. This new meteorological organization is expected to cost about £34,000 in the first year.

8. **Wireless.**—Increasing use has been made of wireless facilities as aids to navigation in the operation of the Melbourne-Hobart and Singapore-Darwin air services, and in the northern section of the Perth-Daly Waters service. D/F. wireless stations have been established at Essendon, Western Junction and Darwin aerodromes. Continuous wireless touch is now maintained between aircraft and ground stations on the Sydney-Melbourne-Hobart air route, over the whole of the overseas air route, and also whilst aircraft are traversing the sparsely populated section of the route between Cloncurry and Darwin.

As with meteorology a comprehensive radio organization has been approved for civil aviation. Briefly, the scheme consists of the establishment of ultra short wave radio beacons and communication and direction finding stations at terminal and intermediate aerodromes along the main regular air routes. As flying conditions are probably most difficult along the Sydney-Melbourne-Launceston air route, air services between these cities will be first catered for. Subsequently, facilities will be provided for the Sydney-Brisbane and Melbourne-Adelaide routes and thereafter the organization will be extended to other air routes throughout the Commonwealth. It is anticipated that equipment for the first mentioned route will be installed and in operation during 1937.

9. **Patrol Boat, Darwin.**—A fast petrol-driven motor boat capable of a speed of 20 knots and with a range of 900 miles was purchased by the Commonwealth Government in 1935 to render aid in the event of any aircraft being forced to alight in the Timor Sea. The boat is also employed for patrol duties in North Australian waters in connexion with the administration of the Department of the Interior.

10. **Aircraft Construction.**—During the past year production of the L.J.W.7 ("Gannet") twin-engined high-wing commercial monoplane, designed and manufactured by Tugan Aircraft Ltd. of Sydney, has continued. A further batch of six of these aircraft, which will bring the total number built to twelve, has recently been laid down. Two "Gannets" have been delivered to the Royal Australian Air Force, and the regular air mail service between Sydney and Broken Hill is operated with this type.

Tugan Aircraft Ltd. has been absorbed by the newly formed Commonwealth Aircraft Corporation Pty. Ltd., but operations are being carried on at the original Mascot factory pending completion of the corporation's extensive modern factory at Fisherman's Bend, Melbourne.

A new type of light single-engined high-wing cabin monoplane has been constructed by Mr. C. A. Butler, of Cootamundra, and will shortly be flight tested. This machine has side by side seats for two, and is fitted with a Cirrus Minor engine.

The activity noted in the previous issue of this publication in connexion with the local manufacture of aircraft materials and components has increased considerably in the past twelve months.

A striking illustration of this increase is afforded by the growing number of manufacturers who have been authorized by the Civil Aviation Board for the issue of release notes, covering such of their products as are intended for incorporation in aircraft in course of construction, or undergoing repair, certifying to their compliance with approved specifications or designs. Approximately twenty firms have already been authorized for this purpose. These include firms manufacturing materials either to standard specifications or to such specifications of the manufacture as have been approved by the Civil Aviation Board, firms manufacturing components to approved drawings, and firms importing aircraft products under release notes from the manufacturer in the country of origin, for resale locally.

This system of ensuring the use of approved materials is assuming considerable importance with the rapid growth of activity in Australian aviation, and the work of administration is steadily increasing in volume.

11. **Aircraft Imports.**—The following table shows the number of aircraft imported into the Commonwealth and Territory of New Guinea during the past five years :—

Year.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37. (To 30th April, 1937.)
Number of aircraft imported	14	15	48	60	38

As a result of the decision of the Commonwealth Government in 1936 to permit the entry of American and other foreign aircraft 21 aircraft of foreign manufacture have been imported into Australia and the Territories, representing 13 types of aircraft ranging from light training aircraft, such as the Taylor "Cub" and Porterfield types to the large multi-engined transport aircraft represented by the Douglas D.C.2 and Lockheed Electra types.

12. **Training of Air Pilots.**—(i) *The Associated Aero Clubs.* These clubs provide facilities in all States for flying instruction and practice. During the year ended 30th April, 1937, 180 pupils qualified for private ("A") pilot's licences. Many graduates have completed advanced courses of training, gained their commercial ("B") licences and now own aircraft. Other pupils have qualified as instructors.

The Commonwealth Government grants assistance to the clubs by providing hangar accommodation, the free use of aerodromes, suitable club houses which are leased to the clubs, and bonuses for each pupil trained to a standard that will enable him to obtain a private ("A") pilot's licence. Bonuses are also paid to the clubs in respect of the renewal of pilots' licences of club members, and each club receives a maintenance grant and an establishment grant conditional on a prescribed number of aircraft being maintained in an airworthy condition and a prescribed amount of flying being performed each year. Included in the aircraft fleets of the several clubs are a number of D.H.40 ("Moth") machines, which were originally loaned by the Commonwealth Government but have now been handed over to the clubs.

Originally instruction was confined to the capital cities, but operations have now been extended by the clubs to a certain number of provincial centres where aircraft and instructors are made available as required.

Aviation pageants are held from time to time by the various Aero Clubs, both at their base cities and at country centres, and have had a valuable educative effect in stimulating interest in aviation.

(ii) *Other Organizations.* Flying training is also carried out intermittently by companies, clubs, or private owners at various centres throughout the Commonwealth. These do not receive Government subsidy.

During the year ended 30th April, 1937, 130 pupils graduated for "A" pilots' licences, making a total of 310 pilots from all training organizations.

13. **Notable Flights.**—Many notable long distance flights have been carried out by Australian pilots. Short accounts of those prior to the year under review are contained in previous issues of the Year Book. (See No. 21 and subsequent issues.)

The outstanding flight during the past year was that of Miss Jean Batten, who, in a Percival Gull aircraft, flew from England to Australia in 5 days 21 hours. This constituted a record for a solo flight between the two countries. Miss Batten subsequently flew across the Tasman Sea from Richmond, New South Wales, to New Plymouth, New Zealand in 9½ hours.

On the 6th October, 1936, a British Monospar aircraft, with a crew of four, on a return flight to England made the journey from Melbourne to Darwin in about 14 hours. The party, however, met with misadventure the following day whilst en route from Darwin to Koepang. Fortunately a forced landing was effected on a small reef in the Timor Sea, some 500 miles west of Darwin. The party was rescued by a small native sailing vessel and some 30 hours later picked up by a merchant ship bound for Durban.

14. **Statistical Summary.**—The collection and compilation of aircraft statistics were undertaken by the Commonwealth Bureau of Census and Statistics on the 1st

July, 1922. The subjoined table gives a summary of operations for the years ended 30th June, 1932 to 1936 :—

CIVIL AVIATION.—AUSTRALIA.—SUMMARY.

Particulars.	Year ended 30th June—				
	1932.	1933.	1934.	1935.	1936.
Registered Aircraft Owners					
(a) No.	115	115	114	123	124
Registered Aircraft (a) No.	189	197	188	268	228
Licensed Pilots—(a)					
Private .. No.	363	370	429	569	714
Commercial .. No.	183	184	201	210	236
Licensed Navigators (a) No.	..	..	..	13	22
Licensed Aircraft Radio Telegraph Operators (a)					
No.	..	..	..	7	8
Licensed Aircraft Radio Telephone Operators (a)					
No.	..	..	..	..	7
Licensed Ground Engineers (a) No.	277	272	261	297	295
Aerodromes—(a)					
Government .. No.	58	59	64	65	63
Public .. No.	96	114	126	146	171
Government Emergency Grounds .. No.	121	119	135	138	148
Flights carried out .. No.	96,192	85,346	89,894	114,947	129,396
Hours flown .. No.	31,959	31,883	35,487	45,693	62,479
Approx. Mileage .. Miles	2,527,700	2,587,389	3,061,449	3,854,424	5,819,751
Passengers carried—					
Paying .. No.	56,883	58,155	54,119	45,540	60,476
Non-paying .. No.	13,771	12,949	10,117	11,743	14,643
Total .. No.	70,654	71,104	64,236	57,283	75,119
Goods, weight carried (b) lb.	221,552	244,258	296,983	249,415	442,407
Mails, weight carried lb.	29,494	36,212	43,627	67,908	121,187
Accidents—					
Persons killed .. No.	7	5	10	28	20
Persons injured .. No.	17	6	12	10	6

(a) At 30th June. (b) Prior to 1935 stage freight has been included in some instances in South Australia and Western Australia.

Separate particulars of flying over the Darwin-Singapore Section of the Imperial Airways route, also included in the above table, are shown below :—

Period.	Number of Flights. (a)	Hours Flown.	Approximate Mileage.	Total Passengers Carried.	Weight of Goods Carried.	Weight of Mail Carried.
December, 1934, to June, 1935 ..	61	1,786	140,706	49	lb.	lb.
Year ended June, 1936 ..	117	2,159	290,542	177	1,019	24,828
					8,564	69,436

(a) The distance between Darwin and Singapore is here regarded as a single flight.

Preliminary figures relating to the Operations of Civil Aircraft in Australia during the year 1936-37 will be found in the Appendix to this volume.

15. New Guinea Activities.—The discovery of gold in New Guinea in 1927 resulted in considerable aviation activity in the vicinity of the gold-fields, which, by ground route, are situated about 70 miles inland from Salamaua, on the north-east coast of the mainland of New Guinea. The value of aircraft as a means of transporting food and stores to the field and of bringing the gold to the seaboard is shown by the fact that, whereas aircraft cover the distance in less than one hour, the nature of the intervening

country is such that a journey by other means occupies more than a week. Specially constructed freight machines are employed for the transportation of dredging machinery and other heavy material to the Bulolo fields. Horses, cattle, motor cars, building material and various kinds of heavy freight are continually being carried inland from the coast in aircraft, and such activity constitutes one of the most notable feats of transport in the history of aviation. Inward mails are carried by Guinea Airways Ltd., under arrangement with the Postmaster General's Department, from Port Moresby to Wau, Lae and Bulolo. The air mail fee is 1½d. per ounce in addition to the ordinary postage, plus 3d. per half-ounce (air mail surcharge) if an Australian air service is also used. Mails are carried by W. R. Carpenter and Co. Ltd. under arrangement with the New Guinea Administration from Salamaua to Wau and other inland mining centres. None of the air services operating in the Territory is subsidized by the Commonwealth Government, but the latter Company and the Pacific Aerial Transport Ltd. hold contracts with the New Guinea Administration for the provision of air transport for Administration passengers and goods between the coast and the gold-fields. Several new aerodromes have been prepared in the Territory and there has been an increase in aviation activities generally. The Companies and persons operating in New Guinea are:—Guinea Airways Ltd.; Holden's Air Transport Services Ltd.; Pacific Aerial Transport Ltd.; W. R. Carpenter and Co. Ltd.; Salamaua Aerial Services; Bulolo Gold Dredging Ltd.; E. J. Stephens Aviation; Lutheran Mission, Finschhafen; Catholic Mission, Alexishafen; and R. J. Parer. The subjoined table gives a summary of operations for the years ended 30th June, 1932 to 1936.

CIVIL AVIATION.—TERRITORY OF NEW GUINEA.—SUMMARY.

Particulars.	Year ended 30th June—				
	1932.	1933.	1934.	1935.	1936.
Registered Aircraft Owners					
(a) No.	6	5	10	9	12
Registered Aircraft (a) No.	15	19	26	25	38
Licensed Pilots—(a)					
Private No.	2	1	4	3	5
Commercial .. . No.	16	21	24	27	27
Licensed Navigators (a) No.	..	..	..	1	1
Licensed Ground Engineers					
(a) No.	30	30	37	42	41
Aerodromes—(a)					
Government .. . No.	2	2	3	3	15
Public No.	..	..	3	5	15
Government Emergency Landing Grounds No.	3	3	15	3	6
Flights carried out No.	4,664	7,228	9,877	14,710	21,934
Hours flown .. . No.	5,160	8,499	10,061	13,022	18,114
Approximate mileage Miles	424,232	680,871	811,440	1,094,308	1,480,083
Passengers carried—					
Paying No.	3,450	6,948	10,799	14,200	15,943
Non-paying .. . No.	31	93	209	203	616
Total No.	3,481	7,041	11,008	14,403	16,559
Goods, weight carried lb.	9,778,072	10,982,936	14,985,723	17,447,746	21,883,413
Mails, weight carried lb.	23,394	47,097	90,046	97,889	128,982
Accidents—					
Persons killed No.	..	2	..	2	1
Persons injured No.	..	..	1	3	..

(a) At 30th June.

Preliminary figures relating to the Operations of Civil Aircraft in New Guinea during the year 1936-37 will be found in the Appendix to this volume.

E. MOTOR VEHICLES.

1. The Motor Car and Motor Industry.—(i) *Evolution of the Motor Car.* In the issue of the Year Book for 1927 (No. 20, p. 319) a short history of the evolution of the motor car is given.

(ii) *Motor Industry.* Although motor cars are not entirely manufactured in Australia, the capital invested in assembling and body building plants is considerable. The importance of the industry is shown by the figures relating to local manufacture of motor bodies and imports of motor cars and fuel which are given in the following table for the years 1931-32 to 1935-36 :—

MOTOR BODIES BUILT, AND BODIES, CHASSIS AND FUELS IMPORTED— AUSTRALIA.

Particulars.			1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Motor bodies built in Australia ..	No.		6,323	13,532	26,302	45,445	67,337
	Value £		450,510	1,100,504	2,112,439	4,180,586	6,043,735
Motor bodies imported ..	No.		61	108	1,116	2,215	1,699
	Value £		7,360	12,233	86,899	179,558	149,593
Chassis imported ..	No.		4,146	15,776	32,924	53,975	75,652
	Value £		355,415	1,306,830	2,528,969	4,096,760	5,507,957
Fuels imported—							
Crude petroleum ..	Million gallons		49	58	58	55	65
	Value £		448,651	486,302	488,341	460,781	539,693
Petroleum spirit, etc. ..	Million gallons		156	181	208	212	255
	Value £		2,622,414	3,218,209	2,852,649	2,706,474	3,792,950

The value of the tyres both locally produced and imported, for which figures are, however, not available, must also be taken into consideration, particularly as the prevailing practice is for distributors to retail cars on a five-tyre basis. Spares, batteries, accessories, etc., are additional items for which there is a wide market in Australia.

2. Registration.—The arrangements for the registration of motor vehicles and the licensing of drivers and riders thereof are not uniform throughout Australia. Methods of registration, licence fees payable, etc., in each State were referred to in Official Year Book No. 16, pp. 337-340, and later issues up to No. 25.

3. Public Vehicles.—In all the capital cities of the States and in many of the most important provincial centres taxi-cabs and other vehicles ply for hire under licence granted either by the Commissioner of Police or the Local Government authority concerned. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.

4. Motor Omnibuses.—Motor omnibus traffic, both in urban and provincial centres, has assumed considerable proportions during recent years, and prior to the constitution of Boards empowered to allocate routes over which omnibuses may operate, had a very marked effect on railway and tramway services. The regulation of traffic of motor vehicles has arisen from the belief that the economic waste arising from duplication of services parallel with or contiguous to existing railway and tramway systems is thus avoided. The general principle governing the allocation of routes is that omnibus services should act as feeders to existing transport utilities. Revenue from licence fees is devoted principally to the maintenance or construction of roadways to enable them to withstand the wear and tear caused by the heavy traffic. In some States the various railway and tramway systems have motor services complementary to their main services. Such services are conducted in New South Wales by the Department of Road Transport and Tramways, in Victoria by the Victorian Railways Commissioners, in South Australia by the South Australian Railways Commissioners and by the Municipal Tramways Trust, Adelaide, and in Tasmania by the Municipality of Hobart. In most instances the omnibus service has been provided to meet the competition of private enterprise and to endeavour to protect the existing transport utilities provided by public bodies.

5. **Motor Vehicles Registered, etc.**—(i) *Year 1935-36.* Particulars of the registration of motor vehicles, etc., for the year 1935-36 are contained in the subjoined table :—

MOTOR VEHICLES.—SUMMARY, 1935-36.

State or Territory.	Motor Vehicles Registered. (a)					Gross Revenue derived from—				
	Motor Cars. (b)	Com- mercial Vehicles (c)	Motor Cycles.	Total.	Per 1,000 of Popu- lation at 30th June, 1936.	Drivers' and Riders' Licences Issued.	Vehicle Registra- tions and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total.
	No.	No.	No.	No.	No.	No.	£	£	£	£
New South Wales ..	178,402	58,895	23,048	260,345	97.7	367,710	1,908,936	188,917	86,932	2,184,785
Victoria ..	143,330	50,500	26,095	219,925	119.1	280,486	1,479,081	72,276	41,568	1,592,925
Queensland ..	67,605	32,410	8,151	108,166	110.3	135,340	628,864	52,007	46,605	727,476
South Australia	47,501	16,836	9,264	73,601	125.3	92,227	576,312	42,200	8,081	626,593
Western Aus- tralia ..	32,320	17,362	6,861	56,552	125.6	65,912	303,242	16,593	22,363	342,198
Tasmania ..	14,036	3,639	3,920	21,595	94.1	25,358	111,122	12,685	10,353	134,160
Northern Terri- tory ..	354	631	40	1,025	192.9	1,033	1,245	468	..	1,713
Federal Capital Territory ..	1,275	294	88	1,657	169.4	2,277	9,086	1,176	47	10,309
Australia ..	484,832	180,567	77,467	742,866	109.6	979,343	5,017,888	386,322	215,949	5,620,159

(a) Exclusive of Trailers (10,276), Road Tractors, etc. (1,102), and Dealers' Plates (4,054). (b) Includes Taxis and Hire Cars. (c) Includes Lorries, Vans, Buses and Utility Trucks.

Particulars relating to the numbers of Motor Vehicles Registered at 30th June, 1937, will be found in the Appendix to this volume.

(ii) *Quinquennium 1932-1936.* The following table shows the number of vehicles registered, licences issued, and revenue received therefrom during each of the years 1931-32 to 1935-36 :—

MOTOR VEHICLES.—REGISTRATIONS, ETC., AUSTRALIA.

Year.	Motor Vehicles Registered.					(b) Revenue derived from—				
	Motor Cars.	Commer- cial Vehicles.	Motor Cycles.	Total.	Per 1,000 of Popu- lation at 30th June.	Drivers' and Riders' Licences Issued.	Vehicle Registra- tions and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total.
							£	£	£	£
1931-32	419,970	a 96,254	71,696	587,920	89.4	754,839	3,717,707	305,175	..	4,022,882
1932-33	438,499	a 105,837	72,896	617,232	93.1	760,973	3,847,934	303,900	..	4,151,843
1933-34	455,199	a 116,341	73,104	644,644	96.6	863,982	4,154,331	341,685	107,080	4,603,096
1934-35	457,684	155,721	75,045	688,450	102.4	910,218	4,507,034	363,194	153,886	5,023,814
1935-36	484,832	180,567	77,467	742,866	100.6	979,343	5,017,888	386,322	215,949	5,620,159

(a) Incomplete, Queensland commercial vehicles included with motor cars. (b) Prior to the year 1933-34 the figures purporting to show the revenue collected were not uniform throughout the States.

(iii) *Relation to Population.* The table hereunder gives the number of vehicles (exclusive of motor cycles) registered per 1,000 of population at 30th June, in each State for each of the years 1921 and 1932 to 1936 :—

MOTOR VEHICLES (EXCLUSIVE OF MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Year.	New South Wales.	Victoria.	Queens- land.	South Aus- tralia.	Western Aus- tralia.	Tas- mania.	North- ern Terri- tory.	Federal Capital Terri- tory.	Aus- tralia.
31st Dec., 1921	15	16	8	24	12	13	(a)	(a)	15
30th June, 1932	73	81	83	85	96	61	119	134	79
" 1933	77	86	86	88	92	62	131	135	82
" 1934	78	90	89	99	97	65	129	143	86
" 1935	83	97	96	98	105	70	95	148	91
" 1936	89	105	102	110	110	77	185	160	98

(a) Not available.

(iv) *Revenue per Motor Vehicle.* The following table gives the approximate average revenue per vehicle (exclusive of motor cycles) received in respect of registration and motor tax in the several States for each year from 1931-32 to 1935-36. In some States the revenue from motor tax on cycles is not separately recorded. In these cases the flat rate provided for cycles in the registration acts has been applied, and the average amounts shown must therefore be regarded as approximate only.

AVERAGE REVENUE PER VEHICLE FROM REGISTRATION FEES AND MOTOR TAX (EXCLUSIVE OF MOTOR CYCLES).

State or Territory.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	7 6 8	6 16 5	7 6 5	7 11 0	7 14 2
Victoria	6 17 5	6 17 8	7 0 2	7 3 5	7 5 11
Queensland	5 19 10	5 17 3	6 1 3	5 18 8	6 0 8
South Australia	8 16 8	8 13 1	7 19 2	8 11 11	8 8 6
Western Australia	6 3 8	6 3 4	6 4 10	5 17 5	5 16 11
Tasmania	5 14 1	5 14 3	5 14 3	5 15 0	5 14 3
Northern Territory	(a) 1 0 0	(a) 1 0 0	(a) 1 0 0	(a) 1 0 0	1 5 0
Federal Capital Territory	5 8 9	5 4 2	5 3 9	5 12 1	5 12 2
Australia	6 19 10	6 15 7	6 19 6	7 2 2	7 4 0

(a) Estimated.

6. *World Motor Vehicle Statistics, 1937.*—The result of the 1937 World Motor Census, conducted by the "American Automobile" magazine, from which the following particulars have been extracted, shows that there were 39,821,927 motor cars, trucks, and buses registered in various countries of the world at 1st January, 1937. This shows an increase of 6.9 per cent. on the figure for the previous year, 37,234,731, and is the highest figure yet attained.

The following table shows the numbers of motor vehicles registered in each continent at 1st January, 1937 :—

MOTOR VEHICLES—WORLD REGISTRATIONS AT 1st JANUARY, 1937.

Continent, etc.	Total Automobiles.	Motor Cars.	Motor Trucks and Buses.(a)	Motor Cycles.(a)
Africa	519,492	417,373	98,139	52,613
America (exclusive of United States of America)	2,005,521	1,586,321	419,150	20,866
United States of America	28,086,380	24,168,329	3,918,051	100,320
Asia	622,159	379,710	242,449	89,721
Europe	7,626,533	5,345,315	2,156,218	2,196,353
Oceania	961,842	724,092	237,150	100,036
Total	39,821,927	32,621,140	7,071,157	2,559,909

(a) Incomplete, except in relation to United States of America.

The next table gives particulars of the numbers of motor vehicles registered in various countries, together with their approximate populations for the purposes of comparison :—

COMPARATIVE MOTOR VEHICLE STATISTICS. 1st JANUARY, 1937.

Country.	Approximate Population in Millions.	Motor Cars, Trucks and Buses.	Motor Cycles.
Australia	7	690,000	77,000
Argentina	12	276,403	..
Canada	11	1,221,587	10,913
France	42	2,100,000	..
Germany	65	1,243,084	1,184,081
Great Britain	47	2,128,036	479,075
India	353	166,611	13,476
Italy	43	415,000	145,000
Japanese Empire	97	147,200	52,000
New Zealand	2	214,849	22,347
Union of South Africa	8	280,225	31,000
United States of America	126	28,086,380	100,320

The foregoing figures are in some cases approximations based on estimates furnished by Trade Commissioners or representative motor trade organizations in the several countries, and in other cases are incomplete, especially in relation to motor cycles.

F. POSTS, TELEGRAPHS AND TELEPHONES.

§ 1. General.

1. **The Commonwealth Postal Department.**—In previous issues of the Year Book some account was given of the procedure in connexion with the transfer to the Federal Government of the postal, telegraphic and telephonic facilities of the separate States. (See Year Book No. 15, p. 601.)

Under the provisions of the Commonwealth Post and Telegraph Act, 1901, the Commonwealth Postal Department was placed under the control of a Postmaster-General, being a responsible Minister with Cabinet rank. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy Director, Posts and Telegraphs.

2. **Postal Facilities.**—(i) *Relation to Area and Population.* The subjoined statement shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices) in each State and in Australia at the 30th June, 1936. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office, as well as the number of inhabitants per office, should be taken into account. The returns given for South Australia in this and all succeeding tables include those for the Northern Territory, while the returns for the Federal Capital Territory are included in those for New South Wales.

POSTAL FACILITIES.—RELATION TO AREA AND POPULATION,
AT 30th JUNE, 1936.

State.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Australia.
Number of post offices (a) ..	2,472	2,537	1,216	784	597	508	8,114
Number of square miles of territory to each office in State	126	35	552	1,153	1,635	52	367
Number of inhabitants to each office	1,082	728	807	756	754	452	835
Number of inhabitants per 100 square miles	862	2,101	146	66	46	876	228

(a) Includes "Official," "Semi-Official," and "Non-Official" Offices.

The foregoing table does not include "telephone" offices at which there is no postal business.

(ii) *Number of Offices.* The following table shows the number of post offices in each State from 1906 to 1935-36:—

POST OFFICES—NUMBER.

State.	At 31st December—		At 30th June—							
	1906.		1916.		1926.		1935-.		1936.	
	Official and Semi-Official Post Offices.	Non-Official Post Offices. (a)	Official and Semi-Official Post Offices.	Non-Official Post Offices. (a)	Official and Semi-Official Post Offices.	Non-Official Post Offices. (a)	Official and Semi-Official Post Offices.	Non-Official Post Offices. (a)	Official and Semi-Official Post Offices.	Non-Official Post Offices. (a)
New South Wales ..	2,288	500	2,140	458	2,221	432	2,019	420	2,043	
Victoria ..	2,316	293	2,366	285	2,429	273	2,263	260	2,268	
Queensland ..	1,354	212	1,119	216	1,068	187	1,020	187	1,029	
South Australia ..	713	147	607	148	660	144	635	143	641	
Western Australia ..	338	154	459	130	593	125	466	126	471	
Tasmania ..	392	51	427	48	475	42	466	42	466	
Australia ..	7,401	1,357	7,208	1,294	7,446	1,203	6,869	1,196	6,918	

(a) Includes offices previously designated as "Allowance" and "Receiving" Offices.

(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at specified dates is given in the appended table:—

POSTAL EMPLOYEES AND MAIL CONTRACTORS.

State.	At 31st December—		At 30th June—							
	1906.		1916.		1926.		1935.		1936.	
	Employees.	Mail Contractors.	Employees.	Mail Contractors.	Employees.	Mail Contractors.	Employees.	Mail Contractors.	Employees.	Mail Contractors.
Central Office ..	(a)	..	(a)	..	130	..	226	..	255	..
New South Wales ..	5,913	1,037	13,106	1,899	14,244	1,924	13,209	2,030	14,319	2,371
Victoria ..	4,896	919	8,840	1,152	11,226	1,156	10,545	1,017	10,006	941
Queensland ..	2,610	630	4,162	806	6,181	850	5,139	1,253	5,430	1,280
South Australia ..	1,734	255	2,816	348	4,275	424	3,393	311	3,538	363
Western Australia ..	1,941	152	2,558	284	2,986	379	2,813	385	2,959	369
Tasmania ..	811	164	1,275	224	1,615	247	1,536	218	1,480	232
Australia ..	17,935	3,157	32,817	4,713	40,657	4,980	36,941	5,214	38,887	5,556

(a) Included in Victorian Staff.

3. *Gross Revenue, Postmaster-General's Department.—Branches.* The gross revenue (actual collections) in respect of each branch of the Department during each of the last five years is shown in the table hereunder:—

GROSS REVENUE, POSTMASTER-GENERAL'S DEPARTMENT.—BRANCHES.

Branch and Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Postal Branch—	£	£	£	£	£	£	£
1931-32 ..	2,305,557	1,583,136	841,602	435,526	381,113	162,695	5,709,629
1932-33 ..	2,340,889	1,620,972	862,051	462,520	397,253	162,112	5,845,797
1933-34 ..	2,431,342	1,673,812	872,913	462,634	402,083	164,630	6,007,414
1934-35 ..	2,556,985	1,765,381	917,172	469,015	433,302	176,576	6,318,431
1935-36 ..	2,704,976	1,849,667	950,010	503,578	451,703	192,274	6,661,648
Telegraph Branch—	£	£	£	£	£	£	£
1931-32 ..	373,139	242,195	194,508	136,321	103,713	36,084	1,085,960
1932-33 ..	358,214	251,097	195,328	136,145	112,154	38,885	1,091,823
1933-34 ..	378,656	263,904	202,579	131,086	120,318	40,385	1,136,928
1934-35 ..	432,771	301,896	222,010	118,533	141,403	43,773	1,260,388
1935-36 ..	442,688	321,752	224,597	112,047	144,933	43,755	1,289,772
Wireless Branch—	£	£	£	£	£	£	£
1931-32 ..	63,384	65,545	12,600	16,870	5,524	4,274	168,197
1932-33 ..	79,702	77,567	15,728	22,698	8,843	5,596	210,134
1933-34 ..	127,453	118,626	28,169	36,250	17,130	9,229	336,857
1934-35 ..	133,177	110,328	20,929	36,363	19,287	9,509	338,593
1935-36 ..	141,337	117,660	35,082	39,096	21,858	10,844	365,877
Telephone Branch—	£	£	£	£	£	£	£
1931-32 ..	2,089,555	1,555,437	792,607	529,790	297,713	134,263	5,399,365
1932-33 ..	2,092,461	1,595,977	787,597	534,157	301,418	134,228	5,445,838
1933-34 ..	2,202,273	1,647,408	818,981	535,158	308,490	135,662	5,647,972
1934-35 ..	2,360,656	1,749,660	884,147	562,999	328,271	141,785	6,027,518
1935-36 ..	2,582,680	1,891,547	945,929	594,140	356,107	151,344	6,521,747
All Branches—	£	£	£	£	£	£	£
1931-32 ..	4,831,635	3,446,313	1,611,117	1,118,807	783,093	337,116	12,165,181
1932-33 ..	4,871,266	3,545,913	1,800,704	1,155,550	812,068	340,821	12,526,592
1933-34 ..	5,114,724	3,795,750	1,922,942	1,173,128	817,021	349,009	13,204,171
1934-35 ..	5,483,580	3,927,267	2,053,258	1,186,910	922,263	371,643	13,944,930
1935-36 ..	5,871,681	4,180,626	2,164,618	1,248,861	974,601	398,057	14,830,044
Total Revenue per head of mean population—							
1931-32 ..	1.88	1.91	1.98	1.92	1.82	1.49	1.89
1932-33 ..	1.87	1.95	1.98	1.98	1.88	1.50	1.91
1933-34 ..	1.96	2.03	2.02	1.98	1.93	1.53	1.97
1934-35 ..	2.07	2.14	2.14	2.01	2.08	1.62	2.08
1935-36 ..	2.20	2.27	2.23	2.11	2.18	1.73	2.20

Compared with the corresponding figures for the previous year, an increase of 6.4 per cent. is shown in the gross revenue earned, the increases in the several branches being as follows:—Postal 5.4 per cent., Telegraph 2.3 per cent., Wireless 8.1 per cent., and Telephone 8.2 per cent.

4. **Expenditure, Postmaster-General's Department.**—(i) *Distribution.* The following table shows, as far as possible, the distribution of actual expenditure on various items in each State during the year ended 30th June, 1936. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc., are included therein.

EXPENDITURE, POSTMASTER-GENERAL'S DEPT.—DISTRIBUTION, 1935-36.

Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£	£
Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary ..	47,458	1,832,749	1,302,031	693,774	458,967	351,824	174,420	4,861,223
General expenses ..	9,539	147,670	103,421	34,405	30,985	23,152	10,419	359,591
Stores and material ..	1,345	63,468	35,003	20,455	13,752	10,811	4,791	149,025
Mail services ..	a 198,039	398,598	244,544	204,350	67,273	81,039	34,725	1,228,568
Engineering services (other than New Works) ..	50,310	908,646	654,197	325,470	244,260	172,383	111,323	2,466,589
Other services ..	139,820	..	..	..	..	..	..	139,820
Total ..	446,511	3,351,131	2,339,196	1,278,454	815,237	639,209	335,678	9,205,416
Pensions and retiring allowances ..	..	33,294	32,845	..	..	23,659	..	89,798
Rent, repairs, maintenance, fittings, &c. ..	..	37,410	34,146	16,265	6,912	6,480	2,652	103,865
Proportion of audit expenses ..	..	4,005	2,767	1,458	888	672	350	10,140
Interest on transferred properties ..	..	114,328	61,362	45,575	37,523	21,869	9,924	290,581
New Works—								
Telegraph, telephone and wireless ..	..	671,720	700,253	135,124	77,784	112,150	60,126	1,757,157
New buildings, &c. ..	..	20,713	73,156	21,334	3,705	22,500	1,945	143,353
Other expenditure not allocated to States ..	2,824,078 (b)	..	..	..	..	..	..	2,824,078
Total ..	3,270,589 (c)	4,232,601	3,243,725	1,498,210	942,049	826,539	410,675	14,424,388 (c)

(a) Orient Steam Navigation Company's Overseas Mail contract and expenditure on air mail services.
 (b) Particulars of apportionment to States not available. (c) Including expenditure not apportioned to States.

(ii) *Total, 1932 to 1936.* The next table gives the actual payments made, as shown by records kept for Treasury purposes in respect of the Postal Department, for each of the years ended 30th June, 1932 to 1936 inclusive.

EXPENDITURE, POSTMASTER-GENERAL'S DEPARTMENT.

Expenditure.	Year ended 30th June—				
	1932.	1933.	1934.	1935.	1936.
	£	£	£	£	£
Total	12,196,307	12,165,210	12,288,173	13,458,581	14,424,388

The total expenditure increased by 7.2 per cent. during 1935-36.

5. **Profit or Loss, Postmaster-General's Department.**—(i) *States, 1935-36.* The foregoing statements of gross revenue and expenditure represent actual collections and payments made and cannot be taken to represent the actual results of the working of the Department for the year. The net results for each branch in the several States after providing for working expenses, depreciation and interest charges, including exchange, during the year, were as follows:—

PROFIT OR LOSS, POSTMASTER-GENERAL'S DEPARTMENT, 1935-36.

Branch.	Profit or Loss.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
		£	£	£	£	£	£	£
Postal ..	{ Profit Loss	795,681 ..	614,232 ..	288,401 ..	135,742 ..	98,605 ..	15,724 ..	1,948,385 ..
Telegraph ..	{ Profit Loss	2,604 ..	53,293 ..	7,070 ..	10,394 ..	12,380 ..	40 ..	64,993 ..
Wireless ..	{ Profit Loss	51,697 ..	39,942 ..	1,740 ..	7,085 ..	984 ..	11,784 ..	86,184 ..
Telephone ..	{ Profit Loss	486,352 ..	296,283 ..	185,034 ..	34,023 ..	3,307 ..	52,530 ..	884,423 ..
All Branches	{ Profit Loss	1,336,334 ..	1,003,750 ..	478,765 ..	98,410 ..	115,276 ..	48,550 ..	2,983,985 ..

After providing for depreciation, pensions and retiring allowances and interest on capital, the year 1935-36 closed with a surplus of £2,983,985. For the preceding year a surplus of £2,407,973 was shown.

(ii) *Branches, 1932 to 1936.* The following statement gives particulars of the operating results of each branch for the period 1932 to 1936:—

PROFIT OR LOSS, POSTMASTER-GENERAL'S DEPARTMENT—BRANCHES.

Year Ended 30th June—	Branch.									
	Postal.		Telegraph.		Wireless.		Telephone.		All Branches.	
	Profit.	Loss.	Profit.	Loss.	Profit.	Loss.	Profit.	Loss.	Profit.	Loss.
	£	£	£	£	£	£	£	£	£	£
1932 ..	1,267,534	..	..	183,367	30,932	..	..	379,090	736,009	..
1933 ..	1,471,685	..	..	101,588	22,796	..	..	200,275	1,192,618	..
1934 ..	1,684,608	..	..	41,012	87,235	..	269,273	..	2,000,104	..
1935 ..	1,828,279	..	15,019	..	162,343	..	402,332	..	2,407,973	..
1936 ..	1,948,385	..	64,993	..	186,184	..	881,423	..	2,983,985	..

6. Capital Account.—The appended statement shows particulars of the fixed assets of the Postmaster-General's Department at 30th June, 1936 :—

FIXED ASSETS, POSTMASTER-GENERAL'S DEPARTMENT, 30th JUNE, 1936.

Particulars.	Net Value, 1st July, 1935.	Capital Expenditure, 1935-36.	Gross Value, 30th June, 1936.	Less Deprecia- tion, &c. 1935-36. (a)	Net Value, 30th June, 1936.
	£	£	£	£	£
Telephone service plant (exclus- ive of Trunk lines)	32,963,326	1,974,139	34,937,465	624,319	34,313,146
Trunk and Telegraph service plant (Aerial Wires)	10,323,468	194,271	10,517,739	80,322	10,437,417
Telegraph service plant	642,995	24,119	667,114	7,020	660,094
Postal service plant	411,555	7,547	419,102	2,505	416,597
Wireless plant	267,050	33,485	300,535	1,511	299,024
Sites, buildings, furniture and office equipment	9,401,058	173,952	9,575,010	14,253	9,560,757
Miscellaneous plant	617,628	79,620	697,248	37,343	659,905
Total	54,627,080	2,487,133	57,114,213	767,273	56,346,940

(a) Includes dismantled assets, depreciation written off, and assets transferred.

During the past quinquennium the value of the fixed assets has increased by 7.6 per cent., the net value at 30th June, 1931, being £52,350,888.

§ 2. Posts.

1. Postal Matter Dealt With.—(i) *Australia.* The following table gives a summary of the postal matter dealt with in Australia during the five years 1932 to 1936. Although mail matter posted in Australia for delivery therein is necessarily handled at least twice, only the numbers dispatched are included in the following table, which consequently gives the number of distinct articles handled :—

POSTAL MATTER DEALT WITH—AUSTRALIA.

Year ended 30th June—	Letters, Postcards, Letter Cards and Packets.		Newspapers.		Parcels.		Registered Articles other than Parcels.	
	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.

POSTED WITHIN AUSTRALIA FOR DELIVERY THEREIN.

1932	677,847	103,437	118,006	18,145	8,841	1,349	6,096	930
1933	699,932	105,974	118,357	17,920	8,661	1,311	6,093	923
1934	733,566	110,217	121,600	18,272	8,549	1,285	6,223	935
1935	752,112	112,215	125,088	18,663	8,450	1,262	6,570	981
1936	777,872	115,225	129,807	19,228	8,605	1,275	6,815	1,009

TOTAL POSTAL MATTER DEALT WITH.

1932	731,134	111,569	139,502	21,288	9,203	1,404	6,731	1,027
1933	751,777	112,963	139,963	21,031	9,044	1,369	6,710	1,016
1934	790,166	118,731	142,040	21,343	8,942	1,344	6,870	1,032
1935	809,720	120,812	147,662	22,031	8,876	1,324	7,273	1,085
1936	835,088	123,700	151,272	22,408	9,058	1,342	7,539	1,117

(ii) *States.* The next table shows separately for each State the postal matter dealt with in 1935-36.

POSTAL MATTER DEALT WITH—STATES. 1935-36. (a)

State.	Letters, Postcards, Letter Cards and Packets.		Newspapers.		Parcels.		Registered Articles, other than Parcels.	
	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.	Number (,000 omitted).	Per 1,000 of Popula- tion.
POSTED FOR DELIVERY WITHIN AUSTRALIA.								
New South Wales	305,912	114,744	62,563	23,467	3,600	1,350	2,567	963
Victoria ..	226,814	123,057	26,553	14,406	1,740	944	1,874	1,017
Queensland ..	100,496	103,371	21,616	22,234	1,635	1,682	1,014	1,043
South Australia ..	56,403	95,378	7,035	11,896	813	1,375	541	915
Western Australia	52,413	117,031	6,143	13,716	685	1,530	560	1,250
Tasmania ..	35,834	155,607	5,897	25,607	132	573	259	1,125
Australia ..	777,872	115,225	129,807	19,228	8,605	1,275	6,815	1,009

OVERSEA DISPATCHED.

New South Wales	9,723	3,647	2,148	806	102	38	146	55
Victoria ..	7,680	4,167	3,166	1,718	47	25	85	46
Queensland ..	2,696	2,773	739	760	16	16	39	40
South Australia ..	2,392	4,045	357	604	8	14	19	32
Western Australia	3,287	7,339	499	1,114	11	25	26	58
Tasmania ..	2,924	12,697	220	955	3	13	3	13
Australia ..	28,702	4,252	7,129	1,056	187	28	318	47

OVERSEA RECEIVED.

New South Wales	11,103	4,105	6,907	2,613	124	47	196	74
Victoria ..	8,832	4,792	2,792	1,515	79	43	127	69
Queensland ..	1,930	1,985	1,108	1,140	21	22	24	35
South Australia ..	1,697	2,870	999	1,689	16	27	16	27
Western Australia	3,600	8,038	1,981	4,423	21	47	36	58
Tasmania ..	1,352	5,871	489	2,123	5	22	7	30
Australia ..	28,514	4,224	14,336	2,124	266	39	406	60

(a) See explanation in paragraph (1).

2. *Value-Payable Parcel Post.*—(i) *General.* The Postal Department undertakes to deliver registered articles sent by parcel post within Australia, or between Papua or Nauru and Australia, to recover from the addressee on delivery a specified sum of money fixed by the sender, and to remit the sum to the sender by money order, for which the usual commission is charged. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, also to meet the requirements of traders and others who do not wish their goods to be delivered except on payment.

(ii) *Summary of Business.* The next statement gives particulars regarding the value-payable post in each State for the years 1932 to 1936 :—

VALUE-PAYABLE PARCEL POST.—SUMMARY.

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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NUMBER OF PARCELS POSTED.

	No.	No.	No.	No.	No.	No.	No.
1932	280,589	37,144	182,902	25,315	80,330	714	606,994
1933	289,975	37,567	210,992	23,559	79,820	1,711	643,624
1934	305,972	40,769	204,459	21,309	79,030	1,782	653,321
1935	309,024	36,959	200,358	19,940	76,174	1,720	644,175
1936	324,800	39,700	192,539	20,340	76,946	2,023	656,348

VALUE COLLECTED.

	£	£	£	£	£	£	£
1932	331,328	47,481	230,761	26,931	83,973	920	721,394
1933	343,155	49,392	261,183	24,704	81,029	1,980	761,443
1934	377,752	55,395	248,002	22,502	83,524	1,970	789,055
1935	364,750	50,469	244,829	19,965	83,364	1,936	765,313
1936	389,595	55,577	236,608	22,347	81,538	2,597	788,262

REVENUE INCLUDING POSTAGE, COMMISSION ON VALUE, REGISTRATION AND MONEY ORDER COMMISSION.

	£	£	£	£	£	£	£
1932	36,606	4,787	23,962	3,088	9,450	90	77,983
1933	37,555	4,952	25,723	3,031	9,867	212	81,340
1934	40,356	5,460	26,947	2,827	10,452	213	86,255
1935	39,653	5,012	24,623	2,307	8,912	215	80,722
1936	43,285	5,334	24,830	2,546	8,775	242	85,012

The number and value of parcels forwarded in New South Wales and Queensland are much higher than in any of the other States, although the system has also found favour in Western Australia. These three States have the largest areas, and consequently more people at long distances from business centres who avail themselves of the value-payable system. Although South Australia also has a large area, the population of that State is, comparatively, not widely spread.

3. *Sea-borne Mail Services.*—(i) *General.* In earlier issues of this work particulars of sea-borne mail services were included, but owing to the restrictions of space the insertion of this information terminated with Year Book No. 22.

(ii) *Amount of Subsidies Paid.* The following table shows the amounts of subsidies paid by the Commonwealth Postal Department for ocean and coastal mail services during the year ended 30th June, 1936 :—

MAIL SUBSIDIES.—OCEAN AND COASTAL SERVICES, 1935-36.

Service.	Orient S.N. Co.	Queens- land Ports.	South Australian Ports.	Western Australian Ports.	Tas- manian Ports.
	£	£	£	£	£
Annual subsidy	110,000	975	4,700	5,500	55,457

4. *Total Cost of Carriage of Mails.*—During the year 1935-36 the amount paid for overseas conveyance of mails at poundage rates by non-contract vessels and on account

of other countries' services was £34,487; by inland services, £533,674; and by railway services, £413,136. The total expenditure during the financial year 1935-36 on the carriage of mails, as disclosed by the Profit and Loss Account, amounted to £1,228,209.

5. **Transactions of the Dead Letter Offices.**—The table hereunder shows the number of letters, postcards and letter-cards, and packets and circulars, including Inland, Interstate and International, dealt with by the Dead Letter Offices in 1935-36, and the methods adopted in the disposal thereof:—

DEAD LETTER OFFICES.—SUMMARY, 1935-36.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
LETTERS, POSTCARDS AND LETTER-CARDS.							
Returned direct to writers or delivered	986,295	228,293	156,766	73,032	111,401	70,626	1,626,413
Destroyed in accordance with Act	67,827	43,852	14,804	9,408	4,136	3,282	143,309
Returned to other States or Countries as unclaimed	42,129	19,480	11,632	5,380	9,929	1,032	89,582
Total	1,096,251	291,625	183,202	87,820	125,466	74,940	1,859,304

PACKETS AND CIRCULARS.							
Returned direct to writers or delivered	833,708	117,044	181,135	10,623	68,626	27,564	1,238,700
Destroyed in accordance with Act	82,237	25,740	26,335	8,110	7,126	1,104	150,552
Returned to other States or Countries as unclaimed	1,927	5,121	4,419	2,021	578	3,462	17,528
Total	917,872	147,905	211,889	20,754	76,330	32,130	1,406,880
Grand Total (letters, packets, etc.)	2,014,123	439,530	395,091	108,574	201,796	107,070	3,266,184

During the year 1935-36 money and valuables to the amount of £73,619 were found in undeliverable postal articles.

6. **Money Orders and Postal Notes.**—(i) *General.* The issue of money orders and postal notes is regulated by sections 74 to 79 of the Post and Telegraph Act, 1901. A money order may be issued for payment of sums up to £20 within Australia, and not exceeding £40 (in some cases £20, and in Mauritius £10) in places abroad. A postal note, which is payable only within Australia and in Papua, cannot be issued for a larger sum than twenty shillings.

(ii) *States, 1935-36.* Particulars regarding the business transacted in each State for the year 1935-36 are given hereunder:—

MONEY ORDERS AND POSTAL NOTES.—SUMMARY, 1935-36.

State.	Value of Money Orders Issued.	Value of Money Orders Paid.	Net Money Order Commission Received.	Value of Postal Notes Issued.	Poundage Received on Postal Notes.
	£	£	£	£	£
New South Wales ..	7,642,776	7,676,916	39,984	3,142,995	74,849
Victoria ..	3,177,822	3,447,608	17,400	2,083,199	51,336
Queensland ..	2,539,631	2,340,537	16,303	846,424	19,302
South Australia ..	902,540	901,495	5,575	479,844	11,821
Western Australia ..	1,463,681	1,330,753	8,968	479,896	10,901
Tasmania ..	576,310	556,886	3,188	188,981	4,509
Australia ..	16,302,760	16,260,195	91,418	7,221,339	172,718

The figures in the foregoing table relating to money orders and postal notes show an increase compared with the previous year.

(iii) *Australia, 1932 to 1936.* The next table shows the total number and value of money orders and postal notes issued and paid in Australia from 1931-32 to 1935-36 :—

MONEY ORDERS AND POSTAL NOTES.—SUMMARY, AUSTRALIA.

Year ended 30th June—	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	No. (,000).	£ (,000).	No. (,000).	£ (,000).	No. (,000).	£ (,000).	No. (,000).	£ (,000).
1932 ..	2,781	14,351	2,788	14,367	16,205	5,579	16,132	5,563
1933 ..	2,707	14,257	2,691	14,229	16,717	5,746	16,735	5,729
1934 ..	2,769	14,646	2,762	14,589	19,595	6,397	19,446	6,370
1935 ..	2,859	15,185	2,847	15,169	19,557	6,650	19,489	6,631
1936 ..	2,968	16,303	2,938	16,260	21,083	7,221	21,103	7,222

(iv) *Classification of Money Orders Issued and Paid.* (a) *Money Orders Issued.* The next table shows the number and value of money orders issued during the year 1935-36, classified according to the country where payable :—

MONEY ORDERS ISSUED.—COUNTRY WHERE PAYABLE, 1935-36.

Where Payable.					
Where Issued.	In Australia.	In New Zealand.	In Great Britain and Ireland.	In Other Countries.	Total.
NUMBER.					
Australia	2,815,198	21,742	92,361	38,846	2,968,147
VALUE.					
Australia	£ 15,890,914	£ 62,892	£ 204,253	£ 144,701	£ 16,302,760

(b) *Money Orders Paid.* The number and value of money orders paid during the year 1935-36, classified according to the country where issued, are given hereunder :—

MONEY ORDERS PAID.—COUNTRY OF ISSUE, 1935-36.

Where Paid.	Where Issued.				Total.
	In Australia.	In New Zealand.	In Great Britain and Ireland.	In Other Countries.	
NUMBER.					
Australia	2,813,123	51,622	47,200	25,667	2,937,612
VALUE.					
Australia	£ 15,870,512	£ 119,731	£ 188,278	£ 81,674	£ 16,260,195

In the tables above, money orders payable or issued in foreign countries which have been sent from or to Australia through the General Post Office in London are included in those payable or issued in Great Britain and Ireland.

(v) *Classification of Postal Notes Paid.* The subjoined table shows the number and value of postal notes paid during the year 1935-36, classified according to the State in which they were issued.

Particulars regarding the total number and value of postal notes issued and paid in each of the last five years have been given previously.

POSTAL NOTES PAID.—STATE OF ISSUE, 1935-36.

Particulars.	Postal Notes Paid in—						
	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
NUMBER.							
Issued in same State	7,490,138	3,948,072	1,866,782	807,367	1,093,052	445,995	15,651,406
Issued in other States	875,797	571,796	954,715	96,483	92,732	2,860,433	5,451,956
Total ..	8,365,935	4,519,868	2,821,497	903,850	1,185,784	3,306,428	21,103,362
VALUE.							
Issued in same State	£ 2,605,470	£ 1,383,811	£ 678,573	£ 289,133	£ 392,295	£ 140,614	£ 5,489,896
Issued in other States	276,900	216,059	283,890	39,203	21,516	894,048	1,731,616
Total ..	2,882,370	1,599,870	962,463	328,336	413,811	1,034,662	7,221,512

The number and value of postal notes paid in Australia during the year showed an increase of 8.3 per cent. and 8.9 per cent. respectively compared with the corresponding figures for the year 1934-35.

§ 3. Telegraphs.

1. *General.*—(i) *Development of System.* A review of the development of the Telegraph Services in Australia was given in a previous issue of this work (see Year Book No. 15, p. 625), but limitations of space preclude the repetition of this information in the present issue. During the past few years substantial improvements in both the speed and grade of telegraph service throughout Australia have been effected, the entire system being subjected to intensive reorganization.

(ii) *External Circulation or Routing of Traffic.* The external circulation system of the Australian telegraph service has been considerably modified, direct communication having been established between cities and towns which formerly were served through intermediate repeating centres. The reorganization has eliminated the loss of time in transit, improved the grade of service, and led to economy as regards the labour formerly required in manual re-transmission. As a result of the reorganization there are now only five repeating centres, eighteen centres having been abolished.

(iii) *Carrier Wave System.* This system which permits a number of messages to be transmitted simultaneously over the one pair of wires is now in operation between Perth and Adelaide, Adelaide and Melbourne, Melbourne and Sydney, and Sydney and Brisbane. There are now 40,192 miles of one-way telegraph carrier channels in operation.

(iv) *Voice-Frequency System.* This system, which enables a number of telegraph channels to be superposed on a single telephone channel by employing frequencies from 420 to 2,460 cycles per second, has been introduced between Sydney and Tamworth. Between these two points 18 duo directional channels have been provided by adopting the voice-frequency principle, equivalent to 9,360 miles of uni-directional channels. In view of the service and economic advantages of the system, extensions to other main telegraph routes are contemplated.

(v) *Direct Telegraph Communication over Great Distances.* The telegraph system in Australia provides direct communication between many places separated by great distances as indicated in the following examples :—Sydney-Perth, 2,695 miles; Perth-Wyndham, 1,933 miles; Melbourne-Brisbane, 1,246 miles; Brisbane-Cairns, 1,056 miles; Adelaide-Perth, 1,627 miles; Melbourne-Perth, 2,104 miles; Adelaide-Darwin, 1,940 miles; and Sydney-Adelaide, 1,068 miles. These direct channels provide a speedy service between the centres named, the average time involved in the transmission of a telegram being ten minutes.

(vi) *Machine Telegraphy.* In order to speed up transmission, machine printing telegraph systems have been introduced between capital cities and between important country centres. Murray multiplex machine apparatus is in operation between Sydney and Melbourne, Sydney and Brisbane, Sydney and Adelaide, Sydney and Perth, Sydney and Canberra, Sydney and Lismore, Sydney and Newcastle, Sydney and Wagga Wagga, Melbourne and Brisbane, Melbourne and Adelaide, Melbourne and Perth, Melbourne and Canberra, Adelaide and Perth, Brisbane and Rockhampton, and Brisbane and Townsville, providing telegraph outlets which permit the carriage of very heavy loads with a minimum transit time. The operation of the apparatus has been steadily improved, and the system now gives a high output. Between Melbourne and Mildura, Sydney and Tamworth, Brisbane and Toowoomba, Perth and Fremantle, and Perth and Kalgoorlie, start-stop telegraph printing systems are in operation.

(vii) *Phonogram Service.* Telephone subscribers may now telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and the innovation means, in effect, that the telegraph system is brought into the home of every telephone subscriber. The number of telegrams lodged by telephone during the twelve months ended 30th June, 1936, was 2,391,962 or 14.2 per cent. of the total lodgments, and the popularity of this facility is growing.

(viii) *Radiograms within Australia.* On 1st May, 1929, the rates for radiograms between Flinders Island, King Island, Wave Hill, Brunette Downs and other places within the Commonwealth were reduced to 1½d. per word with a minimum charge of two shillings. Communication at these rates was extended to Lord Howe Island in August, 1929.

(ix) *Pedal Wireless Stations.* A number of privately operated pedal wireless transceiver stations have been established in the far North-West of the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. These pedal stations are sponsored by the Australian Aerial Medical Services and communicate by wireless with base stations established at Wyndham and Port Hedland. The radiogram rates of 1½d. per word with a minimum charge of two shillings apply also to pedal station telegrams.

(x) *Picturegram Service.* During the year ended 30th June, 1936, 294 picturegrams were transmitted between Sydney and Melbourne, the revenue being £637. Any kind of picture or document may be accepted for transmission, the charges varying from 30s. to 67s. 6d. according to the size of the picture or document and the grade of transmission desired.

(xi) *Overseas Phototelegram Service.* An overseas phototelegram service, "via Beam," was inaugurated in October 1934, permitting the transmission in either direction of facsimiles between Sydney or Melbourne and England, of dimensions up to a maximum of ten inches by nine inches. The charges are calculated at the rate of three shillings and three pence per square centimetre with a minimum charge of £16 5s. as for 100 square centimetres.

(xii) *Special Telegram Forms.* The use of appropriately designed telegram forms for conveying Christmas and New Year greetings continues to increase in volume and popularity. The increase since the inception of this facility in 1929 represents 118.4 per cent. :—

Year.						No. of Greeting Telegrams.
1929	..	..	..	..	..	144,102
1930	..	..	..	..	..	157,705
1931	..	..	..	..	..	184,142
1932	..	..	..	..	..	191,156
1933	..	..	..	..	..	192,363
1934	..	..	..	..	..	235,252
1935	..	..	..	..	..	291,588
1936	..	..	..	..	..	314,756

During the year 1933-34 telegram forms of special design and attractive colouring in connexion with Mothers' Day messages, Birthday greetings and Congratulatory telegrams were placed at the disposal of the public. The popularity of these facilities is indicated by the increase in the number of Mothers' Day telegrams from 16,091 in 1934 to 39,128 in 1937. No statistics are available in respect of Birthday greetings and Congratulatory messages, but it is estimated that the number of telegrams in these categories exceeds 500,000 annually. In 1936 two additional greeting facilities employing ornamental telegram stationery were introduced, one for the conveyance of social greetings and the other for use during Easter-tide. The number of Easter Greeting telegrams in 1935, prior to the introduction of the special form for the occasion, was 4,164. This figure increased to 9,867 in 1937. Extensive use is also being made of the new Social telegram service, regarding which definite statistics are not available.

(xiii) *Private Wire Teleprinter and Printergram Services.* In conformity with its policy of placing at the service of the public new developments in communication, the Department has now introduced the teleprinter service. This may be briefly defined as typewriting over electrical circuits, teleprints being similar in performance to typewriters, except that the keyboard and platen are electrically connected by means of a telegraph line.

This facility combines the speed of the telegraph and the flexibility and personal touch of the telephone with the accuracy and permanency of the printed word. It affords the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles. Communications are automatically produced at both ends exactly as sent, and information may be despatched with the utmost privacy even in exposed situations where other means are unsuitable. It affords two-way communication at speeds up to 60 words a minute.

Printergram services connecting any business premises with the local Telegraph Office for the transmission and reception of telegrams are also available. This saves time and labour, while providing a permanent record of each transaction.

Twenty-four private wire services employing 92 teleprinter units have already been installed, including a stock ticker service enabling the simultaneous communication of information from a single transmitting unit located in the Sydney Stock Exchange to each of 35 printer units installed in the offices of city stock-brokers.

2. **Telegraph Offices, Length of Lines and Wire.**—(i) *Summary for Australia.* The following table shows the number of telegraph offices and the length of telegraph lines and of telegraph wire available for use in Australia in each year from 1932 to 1936 :—

TELEGRAPHS, AUSTRALIA.—SUMMARY.

Particulars for Year ended 30th June.	1932.	1933.	1934.	1935.	1936.
Number of offices	9,160	9,162	9,199	9,255	9,252
Length of wire (miles)—					
Telegraph purposes only	58,891	55,302	54,655	54,806	56,292
Telegraph and telephone purposes ..	98,369	101,797	102,953	104,203	113,277
Length of line (miles)—					
Conductors in Morse cable	4,157	4,401	4,538	4,694	4,815
Conductors in submarine cable					
(statute miles)	4,863	4,833	4,764	4,883	5,193
Pole routes (miles)	100,507	99,951	96,395	97,694	97,850

(ii) *States.* The following table gives corresponding particulars for each State for the year 1935-36 :—

TELEGRAPHS.—STATES, SUMMARY, 30th JUNE, 1936.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia
Number of offices	3,042	2,411	1,519	818	932	530	9,252
Length of wire (miles)—							
Telegraph purposes only	16,723	7,911	15,034	6,756	9,200	668	56,292
Telegraph and telephone							
purposes	44,461	14,057	31,467	13,800	8,039	1,453	113,277
Length of line (miles)—							
Conductors in Morse cable	2,651	1,456	485	..	199	24	4,815
Conductors in submarine							
cable (statute miles)	3,760	289	317	227	193	407	5,193
Pole routes (miles)	32,839	19,186	15,895	14,913	11,532	3,485	97,850

A total length of 160,500 miles of wire is available for telegraph purposes, of which 113,277 miles are also used for telephone purposes. Compared with those for the previous year, the figures show an increase of 10,560 miles (6.6 per cent.) in the total length and an increase of 9,074 miles (8.7 per cent.) in the length of line used for both telegraph and telephone purposes.

3. **Number of Telegrams Dispatched.**—(i) *Australia.* The number of telegrams dispatched to destinations within Australia in each of the last five years is given hereunder :—

TELEGRAMS DISPATCHED.—AUSTRALIA.

Telegrams.	Year ended 30th June—				
	1932.	1933.	1934.	1935.	1936.
Number (a)	12,679,951	12,778,028	13,393,627	14,617,871	15,508,698

(a) Including interstate cablegram traffic, and radiogram traffic with islands adjacent to the Commonwealth and to ships at sea.

(ii) *States.* The appended table shows the total number of telegrams dispatched in each State in 1935-36 according to the class of message transmitted:—

TELEGRAMS DISPATCHED(a).—STATES, 1935-36.

Class of Message Transmitted within Australia.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	No.	No.	No.	No.	No.	No.	No.
Paid and Collect—							
Ordinary ..	4,563,771	3,970,595	2,153,130	1,005,689	1,580,995	288,008	12,908,194
Urgent ..	220,644	68,437	63,987	38,269	49,432	10,652	451,421
Press ..	198,389	108,803	80,778	42,435	45,645	26,578	502,628
Lettergram ..	84,735	52,963	73,045	37,005	101,900	30,443	380,157
Radiogram ..	30,780	3,438	6,836	5,121	2,992	4,400	53,573
Total ..	5,008,310	3,344,230	2,677,782	1,128,510	1,787,030	360,087	14,355,973
Unpaid—							
Service ..	148,459	54,317	58,984	40,235	49,263	20,725	371,983
Shipping ..	24,865	74,082	15,957	3,725	10,587	5,234	135,350
Meteorological ..	201,397	80,381	92,042	115,930	118,183	31,459	645,392
Total ..	374,721	215,680	166,983	159,890	178,033	57,418	1,152,725
Grand Total ..	5,473,040	3,519,910	2,844,765	1,288,400	1,965,063	417,505	15,508,698

(a) See Note (a) above.

The figures in the foregoing table show an increase in the total volume of telegraph business of 800,827 messages (6.00 per cent.) as compared with the previous year.

4. **Letter-telegrams.**—Letter-telegrams are accepted at any hour at telegraph offices which are open for business after 7 p.m., subject to the condition that delivery is effected by posting at the letter-telegram office of destination.

5. **Revenue and Expenditure.**—Particulars of the revenue and net operating results of the telegraph systems for the years 1931-32 to 1935-36 are given in earlier pages.

6. **Telegraph Density.**—The latest statistics available disclose that, on a population basis, Australia now occupies a pre-eminent position in the world in the use of the Telegraph Service, with an average of 2.1 messages annually per head of population. The United States of America has the second highest average of 1.3, followed by Norway, and Spain with 1.0 per head of population. The following table gives the figures for the more important countries:—

TELEGRAPH DENSITY STATISTICS—CHIEF COUNTRIES.

Country.	Percentage of Telegrams to Total Wire Communication.	Telegraph Communication per Head of Population.
Australia ..	3.2	2.1
Austria ..	0.3	0.2
Belgium ..	2.1	0.7
Canada ..	0.4	0.9
Czechoslovakia ..	1.4	0.3
Denmark ..	0.3	0.5
Finland ..	0.3	0.2
France ..	3.1	0.7
Germany ..	0.7	0.3
Great Britain ..	2.5	0.9
Hungary ..	1.3	0.2
Japan ..	1.3	0.8
Netherlands ..	0.8	0.4
Norway ..	1.2	1.0
Poland ..	0.6	0.1
Spain ..	3.2	1.0
Sweden ..	0.4	0.6
Switzerland ..	0.7	0.5
Union of South Africa ..	2.2	0.7
United States of America ..	0.7	1.3

§ 4. Overseas Cable and Radio Communication.

1. **First Cable Communication with the Old World.**—In earlier issues of the Year Book will be found a detailed account of the connexion of Australia with the old world by means of submarine cables. (*See* No. 6, p. 770.)

2. **General Cable Services.**—Descriptions of the various cable services between Australia and other countries are given in Year Book No. 22, pp. 335 and 336.

3. **Merging of Cable and Wireless Interests.**—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928 to examine the situation which had arisen as the result of the competition of the Beam Wireless with the Cable services, the Imperial and International Communications Limited was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company. Further particulars in relation to wireless services will be found in par. 5 of this section and in § 6, Radio Telegraphy and Telephony.

4. **Overseas Cable and Radio Business.**—(i) *Australia.* The subjoined table shows the number of cablegrams and radiotelegrams received from and dispatched overseas in Australia from 1933-34 to 1935-36 :—

CABLEGRAMS AND RADIOTELEGRAMS.—AUSTRALIA.

Messages.	Number Received.			Number Dispatched.			Total Number Received and Dispatched.		
	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.
Number ..	608,323	625,842	639,142	656,935	684,761	693,864	1,265,258	1,310,603	1,333,006

(ii) *States.* The number of cablegrams and radiotelegrams received from and dispatched overseas in each State during the year 1935-36 is given hereunder :—

CABLEGRAMS AND RADIOTELEGRAMS.—STATES, 1935-36.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number received ..	335,051	207,995	23,767	32,022	29,930	10,377	639,142
Number dispatched	343,896	233,018	29,212	36,105	44,964	9,669	693,864
Total ..	678,947	441,013	52,979	68,127	71,894	20,046	1,333,006

(a) Exclusive of interstate cablegrams, which are included with interstate telegrams.

5. **Cable and Radio (Beam) Rates.**—(i) *Ordinary Messages.* From 1st February, 1927, the cable rates (per word) between Australia and Great Britain were reduced as follows :—Ordinary, 2s. 6d. to 2s. ; deferred ordinary, 1s. 3d. to 1s. ; and Government, 1s. 4d. to 1s. 0½d., and substantial reductions were also made on the Canadian service (via Pacific) as from the same date. The rates between Australia and Great Britain "Via Beam" are—Ordinary, 1s. 8d. ; deferred ordinary, 10d. ; Government, 10d.

The following are the rates at present operating in regard to traffic with the principal countries :—

CABLEGRAM AND RADIOTELEGRAM RATES, JUNE, 1936.

To—	Rate per Word and Route.	
	Via Cable.	Via Beam.
European Countries	2s. 6d. to 2s. 7d.	1s. 11½d. to 2s. 5½d.
Asiatic Countries	2s. 5d. to 6s. 3d.	.. ..
Africa	1s. 8d. to 5s. 4d.	2s. 2½d. to 2s. 11d.
North America	1s. 7d. to 4s. 4d.	1s. 5½d. to 3s. 7d.
Central America	3s. 10d. to 6s. 1d.	3s. 5½d. to 4s. 10d.
West Indies	3s. 0d. to 5s. 8d.	.. ..
South America	4s. 1d. to 7s. 5d.	3s. 9d. to 6s.

(ii) *Deferred Telegrams (via Cable or Radio).* Under this system a reduction of 50 per cent. in the ordinary cable or radio charges is made under certain conditions. Any such messages which have not reached their destination within 24 hours may be transmitted in turn with full-rate messages. This service, together with the "Daily Letter Telegram" service, has affected the ordinary business to a considerable extent. "Deferred Press" telegrams, subject to a delay of 18 hours, may be exchanged between Australia and (a) Great Britain at the rate of 4½d. per word by cable and 3d. per word via radio; (b) Canada, at 2½d. per word by cable and 2½d. per word via radio; and (c) United States of America, at 3d. to 4d. per word by cable and 3½d. to 4d. per word via radio.

(iii) *Daily Letter Telegrams.* The Daily Letter Telegram service was inaugurated in September, 1923, between Australia and Great Britain and Canada, later being extended to most countries in the British Empire and in Europe, to the United States and to certain other places. In accordance with the decision of the International Telegraph Conference which was held at Madrid in 1932, the charges on Daily Letter Telegrams have, since 1st April, 1933, been based on one-third of the tariff per word for full-rate messages, and are now subject to a minimum charge as for 25 words (in lieu of 20 as previously). These messages are delivered on the morning of the second day following that of lodgment.

(iv) *Week-end Letter Telegrams.* The Week-end Letter Telegram facility which had been in operation for a number of years between Australia and certain other countries was abolished on 1st April, 1933, in accordance with the decision of the Madrid International Telegraph Conference.

(v) *Press Telegrams.* The rate per word ordinary on press messages exchanged with Great Britain is 6d. by cable and 4d. via radio, while that on deferred press is 4½d. and 3d. respectively.

(vi) *Night Letter Telegrams.* A Night Letter Telegram service was introduced between Australia and New Zealand on 1st May, 1924, and was extended to Fiji on 1st December, 1924. As from 1st April, 1933, the minimum charge for messages has been fixed as for 25 words (in lieu of 20 as previously) in accordance with a decision of the Madrid Conference, the minimum charges being—to New Zealand, 3s. 0d. minimum, 2d. for each additional word beyond 25; Suva, 5s. 10d. minimum, 3d. for each additional word; other places in Fiji, 7s. 4d. minimum, and 4d. for each additional word beyond 25. Night Letter Telegrams are accepted at any time and are delivered by first post on the morning following receipt.

(vii) *Christmas Greeting Telegram Service.* A special Christmas and New Year greeting service is available between Australia and overseas countries during the Christmas and New Year period each year. Special low rates are charged for these telegrams, the texts of which must be purely of a greeting nature. The messages are delivered on an appropriately designed form.

(viii) *Easter Greeting Telegram Service.* A special Easter greeting service is available between Australia and the United Kingdom, including Northern Ireland, during Easter periods. Daily letter telegram rates are applicable but with the concession that the minimum number of chargeable words is reduced to ten. The texts of such telegrams are restricted to messages purely of a social or greeting character.

(ix) *Jewish New Year Greeting Telegram Service.* A special greeting telegram service has been established between Australia and certain overseas countries, including the United Kingdom, Egypt, Palestine, South Africa, United States of America and Canada for use during the Jewish New Year period. A specially reduced rate is charged for the service with a minimum of ten words. The texts of such messages must consist of greetings only and be written in plain language.

(x) *De-Luxe Telegram Service.* A de-luxe telegram service has been established between Australia and certain of the more important overseas countries whereby, on payment of an additional fee of sixpence per telegram, the message will be delivered to the addressee on an ornamental form enclosed in a decorative envelope.

§ 5. Telephones.

1. *Telephone Services.*—(i) *Mileage, etc., Australia.* The following table shows the mileage of lines, etc., for telephone purposes, giving trunk lines separately, on 30th June, 1933 to 1936.

TELEPHONE LINES.—AUSTRALIA.

Particulars.	Year ended 30th June—			
	1933.	1934.	1935.	1936.
Ordinary Lines—				
Conduits duct miles	6,454	6,733	7,128	7,771
“ “ “ “ route miles	3,776	4,079	4,467	5,094
Conductors in aerial and underground cables .. loop mileage	826,788	837,094	847,393	861,437
Working conductors in cables for junction circuits, not included above .. loop mileage	72,713	71,592	74,849	75,094
Open conductors .. single wire mileage	418,053	419,015	417,640	421,075
Trunk Lines—				
Telephone trunk lines only .. miles	232,409	228,084	231,125	230,684
Telegraph and telephone purposes ..	101,797	102,953	104,203	113,277

(ii) *Comparison with Other Countries.* The gratifying rate of telephone development experienced during 1934–35 was maintained in 1935–36 when 30,945 telephones were added to the system compared with 30,975 in the preceding year. The growth has been very satisfactory since the passing of the depression period. A pleasing fact is that the improvement has not been confined to metropolitan areas, a net gain of 7,352 telephones having been recorded in the country districts during 1935–36. This represents an increase of 63 per cent on the corresponding figures for the previous year. There are 83.1 telephones per 1,000 of population and Australia occupies seventh place among countries with the greatest density of telephones. The average length of wire per telephone in Australia is 4.75 miles.

(iii) *Trunk Line System.* A nation-wide telephone service is now available in Australia, channels being provided to practically every settled area. The enormous distances involved have been so successfully bridged for telephone communication purposes by the extensive use of repeaters and modern telephone carrier systems that conversation is now practicable between Wiluna in Western Australia and Cloncurry in Queensland, a channel distance of 5,500 miles, which is probably a record in land-line telephony.

The Tasmania–Mainland telephone service, which was inaugurated on the 25th March, 1936, by means of a submarine cable across Bass Strait, is proving very popular.

The cable, which is 161 nautical miles long, is the longest and most modern of its kind in the world, and although furnished with only a single core it allows no less than five telephone and seven duplex telegraph circuits to be operated simultaneously. In addition it provides a single channel for transmitting broadcast programmes for radiation from wireless broadcasting stations in Tasmania and the Mainland.

At the 30th June, 1936, there were 75 carrier systems in service in Australia, giving a total of 131 separate speech channels with an aggregate mileage of approximately 36,200 miles.

(iv) *Automatic Exchanges.* At the 30th June, 1936, there were 101 automatic or semi-automatic exchanges in operation, providing facilities for 252,211 telephones, 245,076 of which were in the telephone networks of the six State capital cities. Of the total service in the Commonwealth 45 per cent. is connected to the automatic system.

(v) *Rural Automatic Exchanges.* Satisfactory experience has been gained with a new type of automatic unit designed specially for use in rural areas and 54 additional units of this particular type are being installed. The residents in the districts concerned will thus be afforded continuous attendance facilities in lieu of the restricted hours of service which now apply.

(vi) *Summary for States.* Particulars relating to the telephone service in each State for the years ended 30th June, 1934 to 1936, will be found in the following table:—

TELEPHONE SERVICES.—SUMMARY.

Particulars.	Year (30th June).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
No. of Exchanges ..	1934	1,935	1,648	962	556	642	344	6,087
	1935	1,951	1,650	979	556	639	342	6,117
	1936	1,967	1,651	995	561	647	345	6,166
No. of Telephone Offices (including Exchanges)	1934	2,950	2,348	1,427	801	947	510	8,983
	1935	2,971	2,363	1,442	814	941	505	9,036
	1936	2,981	2,342	1,461	814	942	505	9,045
No. of lines connected ..	1934	139,485	113,983	49,009	37,713	20,832	11,599	373,621
	1935	150,257	121,631	51,448	38,652	22,129	11,908	396,025
	1936	160,323	128,313	53,784	39,911	23,020	12,310	417,661
No. of instruments con- nected	1934	188,694	157,802	63,762	49,089	27,731	14,324	501,402
	1935	202,363	168,198	67,161	50,512	29,336	14,807	532,377
	1936	215,803	177,397	70,844	52,585	30,882	15,357	562,868
(a) No. of subscribers' instruments	1934	183,378	154,137	61,382	47,537	26,455	13,499	486,388
	1935	197,881	164,372	64,961	48,816	28,612	13,972	510,551
	1936	210,099	173,436	68,288	50,054	29,553	14,511	546,841
(b) No. of public tele- phones	1934	3,353	2,344	1,559	803	900	541	9,500
	1935	3,459	2,408	1,595	824	888	537	9,711
	1936	3,561	2,412	1,633	834	896	542	9,878
(c) No. of other local instruments	1934	1,963	1,321	821	749	376	284	5,514
	1935	2,050	1,417	872	772	406	298	5,815
	1936	2,143	1,549	923	797	433	304	6,149
Instruments per 100 of population	1934	7.17	8.62	6.66	8.34	6.27	6.28	7.51
	1935	7.62	9.15	6.98	8.56	6.58	6.47	7.92
	1936	8.06	9.60	7.23	8.88	6.85	6.67	8.31
Earnings	1934	£ 2,245,130	£ 1,666,633	£ 835,162	£ 538,001	£ 316,772	£ 139,614	£ 5,741,321
	1935	2,400,286	1,792,748	898,346	559,646	341,175	145,212	6,137,413
	1936	2,646,392	1,940,307	965,820	598,719	377,602	160,026	6,688,875
Working expenses ..	1934	1,400,843	1,077,961	493,682	408,115	231,433	143,922	3,764,956
	1935	1,498,540	1,171,206	522,607	433,843	256,182	162,118	4,021,712
	1936	1,592,115	1,221,796	559,845	458,337	277,188	168,181	4,277,162
Percentage of working ex- penses on earnings	1934	62.80	64.68	59.11	75.86	73.06	103.09	65.58
	1935	62.43	65.34	58.17	77.52	69.21	111.79	65.58
	1936	60.16	62.97	57.97	76.55	73.41	105.10	63.95

The number of instruments per 100 of population increased from 7.92 in 1934-35 to 8.31 in 1935-36. The actual number of instruments increased from 532,377 to 562,868, a gain of 5.73 per cent. Of the total instruments connected at 30th June, 1936, 227,707, or 40.5 per cent., were served by exchanges situated beyond the limits of the telephone networks of the six State capital cities. The metropolitan networks are limited to a radius of 15 miles from the General Post Office in Sydney and Melbourne, and 10 miles in the other State capital cities. The modern handset telephone, which was introduced by the Department some years ago, has been adopted extensively by subscribers. The number in service at the 31st December, 1936, was 103,285, which represents nearly one-fifth of the total telephones installed.

(vii) *Systems in Use.* The following table shows the percentage of automatic, common battery and magneto telephone lines at 30th June, 1934 to 1936 :—

PERCENTAGE OF AUTOMATIC, COMMON BATTERY AND MAGNETO LINES.

System.	30th June.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		%	%	%	%	%	%	%
Automatic	1934	46.14	38.55	36.50	37.51	49.08	30.22	41.35
	1935	48.44	40.66	37.99	38.74	50.86	31.17	43.36
	1936	50.33	42.25	39.15	39.58	52.36	32.26	44.96
Common Battery ..	1934	2.84	19.18	..	13.90	..	17.36	8.88
	1935	2.96	18.88	..	14.10	..	17.23	8.82
	1936	3.01	18.44	..	14.22	..	17.25	8.69
Magneto	1934	51.02	42.27	63.50	48.59	50.92	52.42	49.77
	1935	48.60	40.46	62.01	47.16	49.14	51.60	47.82
	1936	46.66	39.31	60.85	46.20	47.64	50.49	46.35

(viii) *Subscribers' Lines and Calling Rates.* The next table gives the number of subscribers' lines and the daily calling rate at central, suburban and rural telephone exchanges in the several States for the year 1935-36 :—

TELEPHONE.—SUBSCRIBERS' LINES AND DAILY CALLING RATE, 1935-36.

State.	Central Exchanges.		Suburban Exchanges.		Rural Exchanges.		Total.	
	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.
New South Wales	No. 18,054	No. 12.19	No. 74,745	No. 4.44	No. 61,117	No. 2.30	No. 153,916	No. 4.50
Victoria ..	7,783	11.29	69,901	4.08	46,692	1.72	124,376	3.64
Queensland ..	7,477	10.04	13,885	3.57	30,803	2.60	52,165	3.92
South Australia ..	5,655	8.89	15,759	3.52	17,229	1.78	38,643	3.53
Western Australia	7,935	6.40	4,604	4.09	9,807	1.56	22,346	3.80
Tasmania ..	3,103	4.32	1,124	2.50	7,566	2.10	11,793	2.73
Australia ..	50,007	9.95	180,018	4.13	173,214	2.09	403,239	3.98

A comparison of the daily calling rates for each class of exchange shows that New South Wales registered the greatest number per line at central and suburban exchanges, and Queensland at rural exchanges. For Australia as a whole, the average number of calls per line at central exchanges was approximately two and a third times the number registered at suburban exchanges, while the average for suburban exchanges was almost double the number shown for rural exchanges.

(ix) *Trunk Line Calls and Revenue.* In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each of the States for the years 1933-34 to 1935-36 :—

TELEPHONES.—TRUNK LINE CALLS AND REVENUE.

Particulars.	New South Wales.	Victoria.	Queens-land.	South Australia.	Western Australia.	Tasmania.	Australia.
	No.	No.	No.	No.	No.	No.	No.
Total Calls for Year—							
1933-34 ..	10,713,588	8,519,955	5,684,435	3,183,224	1,653,861	1,241,947	30,997,010
1934-35 ..	11,163,557	8,987,751	6,091,847	3,369,381	1,778,511	1,313,679	32,704,626
1935-36 ..	12,440,869	9,778,457	6,526,726	3,779,254	1,990,976	1,470,956	35,987,238
Total Revenue for Year—	£	£	£	£	£	£	£
1933-34 ..	527,651	380,004	317,223	149,272	87,939	41,667	1,503,756
1934-35 ..	552,489	403,206	346,821	152,233	94,328	42,535	1,591,612
1935-36 ..	599,000	432,635	365,237	165,208	102,328	49,351	1,713,759
Average Revenue per Call—	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1933-34 ..	11.82	10.70	13.40	11.25	12.76	8.05	11.64
1934-35 ..	11.88	10.76	13.60	10.84	12.73	7.77	11.68
1935-36 ..	11.65	10.62	13.43	10.49	12.33	8.06	11.43

The number of trunk line calls during 1935-36 increased by over three and a quarter millions, or by 10.03 per cent. compared with the figures for the previous year, while the average revenue per call decreased by 0.25d.

2. Revenue from Telephones.—Particulars regarding the revenue from telephone services are included in tables in § 1.

§ 6. Radio Telegraphy and Telephony.

1. General.—A statement in regard to the initial steps taken to establish radio telegraphy in Australia was given in Official Year Book No. 18, p. 343.

2. Wireless Licences.—Under the Wireless Telegraphy Act and Regulations, no wireless station can be installed or operated without a licence from the Postmaster-General. Licences are issued for the following:—(a) Coast Stations, which are operated at various points around the coast and in Papua and New Guinea by Amalgamated Wireless (Australasia) Ltd., under agreement with the Commonwealth; (b) Ship Stations (regulations under the Navigation Act 1935 require that all ships registered in Australia and engaged in interstate traffic shall have an efficient radio telegraph installation, which in the case of cargo vessels of less than 750 tons gross register shall include apparatus for automatically transmitting prescribed signals of distress, these vessels not being required to carry fully qualified operators; similar legislation, designed to ensure the safety of life at sea, has also been introduced by the Governments of New South Wales, Victoria and Queensland); (c) Land Stations to be operated where no telegraph or telephone facilities exist; (d) Broadcasting Stations, other than those of the National Broadcasting Service; (e) Broadcast Listeners' Receiving Sets; (f) Portable Stations on motor cars, etc.; (g) Aircraft Stations; (h) Experimental Stations; and (i) Special Stations, i.e., stations other than those named above.

The following table shows the number of each class of licence issued in each State, etc., during the year 1935-36:—

WIRELESS LICENCES, 1935-36.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	F.C.T.	Total Aust.	Papua and New Guinea	Grand Total.
Coast	2	1	6	1	5	3	1	..	19	9	28
Ship	75	90	15	9	4	1	1	..	195	..	195
Aircraft	1	3	5	..	2	2	1	..	14	..	14
Land (b)	8	3	25	8	16	4	27	..	91	14	105
Broadcasting (a) ..	23	17	16	6	5	4	..	1	72	1	73
Broadcast listeners' ..	314,426	263,414	83,025	87,251	49,987	24,118	84	1,305	823,610	3	823,613
Experimental	605	403	199	164	94	50	1	4	1,520	8	1,528
Portable	12	4	4	1	1	..	4	..	26	3	29
Special	32	21	4	..	3	..	..	..	60	..	60
Total Licences Issued	113,184	201,650	83,299	87,188	36,111	21,182	112	1,313	828,097	28	828,125

(a) There were also fifteen stations operated by the National Broadcasting Service, including a short-wave station (3LR, Lyndhurst, Victoria). (b) In addition to the licensed stations there were two operated by the Postmaster-General's Department, viz., Wave Hill (N.T.) and Camooweal (Q.), and fourteen low-powered stations established by the Government of the Territory of New Guinea.

Similar particulars to the above in relation to the year 1936-37 will be found in the Appendix to this volume.

3. **Broadcasting**—(i) *The National Broadcasting Service.* The technical services for the National Service are provided by the Postmaster-General's Department, and the programmes by the Australian Broadcasting Commission, a body consisting of five members, constituted under the provisions of the Australian Broadcasting Commission Act. The fee for a broadcast listener's licence is 21s. per annum for a receiver situated approximately within 250 miles from a station of the National Service, and 15s. per annum in the territory beyond. Licences are issued free to blind persons. The Commission receives 12s. from each fee, the Department retaining the balance.

The National Broadcasting System of the Commonwealth at present comprises 21 transmitting stations, as follows:—2FC Sydney, 2BL Sydney, 2NC Newcastle, 2CO Corowa, 2NR Lawrence, 2CR Cummoek, 3LO Melbourne, 3AR Melbourne, 3GI Sale, 3WF Dooen, Short Wave station 3LR Lyndhurst, 4QG Brisbane, 4RK Rockhampton, 4QN Townsville, 5CL Adelaide, 5CK Crystal Brook, 6WF Perth, 6WA Minding, 6GF Kalgoorlie, 7ZL Hobart and 7NT Kelso. Contracts are current for the supply of two further stations for installation in Brisbane and Adelaide respectively to permit of the radiating of alternative programmes in those cities. With the exception of 3LR all transmitters operate within the frequency band of 550 to 1500 k.c.

Country regional stations normally radiate programmes from the central studio of the nearest capital city. To permit of this each such station is joined to its respective studio by a high quality programme transmission circuit, the total length of such circuits in use in the Commonwealth being 3,158 miles. A Commonwealth-wide system of network broadcasting is being more and more utilized, the total length of interstate lines in use permanently for this purpose for the National Broadcasting Service alone being 3,912 miles. As occasion demands, wide-band telephone circuits to the extent of several thousands of miles are employed to supplement this interstate network. Programme carrier channels having a 7,500 cycle band width and operating on the lower side band of a 42.5 k.c. carrier are extensively employed.

All new stations are being equipped with a tuned capacity-topped radiator of a type developed by the Department. Extensive measurements on radiators of this type that have been completed, including measurements made during flights over the radiators by aeroplane, show that they are effective in reducing indirect radiation.

Short-wave programmes radiated by overseas stations, particularly from the Empire stations at Daventry, are received regularly at the departmental high frequency receiving station at Mont Park, and are re-radiated over the National network when the subject matter is of sufficiently wide local interest.

(ii) *Commercial Broadcasting Stations.* The services of other broadcasting stations are conducted by private enterprise under licence from the Postmaster-General. Licences are granted on conditions which ensure satisfactory alternative programmes for listeners. The fee for a broadcasting station licence is £25 and the maximum period of a licence is three years, although they may be renewed annually at the discretion of the Postmaster-General. Licensees of these stations do not share in the listeners' licence fees, but rely for their income on revenue received from the broadcasting of advertisements and other publicity. The number of these stations in operation at 30th April, 1937, was 78, and there are several stations in prospect.

(iii) *Radio Inductive Interference.* The Postmaster-General's Department takes active measures to suppress, so far as possible, interference with broadcast reception resulting from the radiations of energy from electric machinery and appliances. During the year, the Department received 9,452 complaints of interfering noises, which, in all but a few instances, were satisfactorily disposed of.

(iv) *Prosecutions Under the Wireless Telegraphy Act.* During the year 3,473 persons were convicted for using unlicensed broadcasting receiving equipment, the total fines amounted to £6,089.

(v) *World Licence Distribution.* The following table shows the number of listeners' licences and the ratio of licences to population in the leading "radio" countries. These particulars, compiled from figures supplied by L'Union Internationale de Radiodiffusion, have been obtained from the Annual Report of the Australian Broadcasting Commission.

WORLD LICENCE DISTRIBUTION, 31st DECEMBER, 1935.

Country.	Listeners' Licences.	
	Total.	Per 100 of Population.
United States of America	22,500,000 (a)	17.79
Denmark	609,226	16.44
Great Britain	7,493,109	16.08
Sweden	834,143	13.38
New Zealand	183,830	11.77
Australia	770,152	11.43
Netherlands	946,844	11.34
Germany	7,192,952	10.76
Switzerland	418,499	10.29
Belgium	746,395	9.22
Canada	862,109 (b)	8.31 (b)
Austria	560,120	8.29
South Africa	130,000	7.51 (c)
Norway	191,378	6.67
Argentine Republic	800,000 (a)	6.56
France	2,625,677	6.26
Czechoslovakia	847,955	5.75
Hungary	352,907	4.03
Finland	144,721	3.91
Chili	150,000 (a)	3.33
Irish Free State	78,600	2.59
Japan	2,372,402 (a)	2.44
Soviet Union	2,800,000	1.67
Poland	491,823	1.46
Mexico	220,000	1.33 (c)
Spain	303,983	1.28
Italy	530,000	1.22

(a) Listeners are not licensed, and the totals shown are estimates only of the number of receiving sets in operation. (b) At 31st March, 1936. (c) Exclusive of native population.

Australia ranks sixth amongst countries of the world in relation to licences per 100 of population.

4. *Oversea Communication by Wireless.*—(i) *Beam Wireless.* The Beam wireless stations provided for under the agreement between the Commonwealth Government and Amalgamated Wireless (Australasia) Ltd. were completed early in 1927, and a direct beam wireless service to England was established on 8th April, 1927. A similar service to North America was opened on 16th June, 1928. Satisfactory communication is maintained daily over a period of hours, and the services are being well patronized by the public. A comparison of the rates charged for "Beam" and Cable messages is given in § 4. Overseas Cable and Radio Communication. Particulars of international traffic via "Beam" are given in par. (iv) (a) following.

(ii) *International Wireless Telephone Service.* Overseas radio telephone services terminating in Australia continue to be well patronized, and from the establishment of the first service in April, 1930, to the 31st March, 1937, 13,154 calls were completed of which 7,564 originated in Australia. Of these, calls 10,225 were connected over the Anglo-Australian service, 2,874 on the Australia-New Zealand channel and 34 were between Australia and Java. In addition 21 calls were exchanged with the new motor vessel "Awatea" which commenced trading between Australia and New Zealand in September, 1936.

The Australian telephone subscriber now has access to about 33,000,000 telephones, or approximately 93 per cent. of the world's total. The concessional tariff introduced in December, 1933, in respect of calls between Australia and Great Britain on Saturdays, has now been extended to European countries. The charge is £1 per minute, plus, in the case of countries on the Continent, a zone fee to cover the use of land lines from London.

(iii) *Wireless Communication in the Pacific.* New Zealand, the territories of New Guinea and Papua and the various small islands in the Pacific Ocean are served by a comprehensive system of wireless communication. In New Guinea and Papua, nine wireless telegraphy stations are established under an agreement between the Commonwealth and Amalgamated Wireless (Australasia) Ltd. for communication with ships at sea, and for inter-communication. Three of these stations Rabaul (New Guinea) and Port Moresby and Samarai (Papua) also have direct communication with the mainland of Australia. In addition, there are, in New Guinea, several low powered transmitters established by the New Guinea Administration for interior communication, while in both Papua and New Guinea several small stations are operated by gold exploration parties, missionary societies and others.

Direct communication by wireless telegraphy exists between Sydney and Suva (Fiji) and Noumea (New Caledonia), while Wellington (New Zealand) is linked with Sydney by wireless telephone. Other wireless telegraph stations in the Pacific include Auckland, Awarua and Chatham Islands (New Zealand), Port Vila (New Hebrides), Apia (Samoa), Tulagi and Vanikoro (Solomon Islands), Nauru (Marshall Islands), Ocean Island (Gilbert and Ellice Group), Truk and Yappu (Caroline Islands), and Guam (Marian Islands).

(iv) *Radiotelegraphic Traffic.* (a) *International.* The following statement shows particulars of international traffic "via Beam" to and from United Kingdom and other places during the year ended 30th June, 1936:—

RADIO TRAFFIC.—INTERNATIONAL, YEAR ENDED 30th JUNE, 1936.

Class of Traffic.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary (a) ..	1,567,138	693,849	2,260,987	1,215,397	273,001	1,488,398
Deferred (Ordinary) ..	987,086	438,770	1,425,856	1,003,243	133,018	1,136,261
Government (a) ..	106,811	13,323	120,134	97,768	5,334	103,102
Press (including deferred press) ..	126,787	25,173	151,960	1,392,071	84,784	1,476,855
Daily letter and greeting telegrams ..	1,939,864	866,200	2,806,064	1,326,916	301,535	1,628,451
Total ..	4,727,686	2,037,315	6,765,001	5,035,395	797,672	5,833,067

(a) Includes Code telegrams.

(b) *Coast Stations.* Particulars of the traffic handled by the several coast stations during the year 1935-36 are as follows:—

RADIO TRAFFIC.—COAST STATIONS, 1935-36.

State or Territory.	Particulars.				
	Total Paying Words.	Messages.			
		Paying.	Service.	Weather.	Total.
	No.	No.	No.	No.	No.
New South Wales	1,712,528	92,950	5,038	3,107	101,095
Victoria	105,898	9,417	150	1,435	11,002
Queensland	223,781	19,530	1,212	2,348	23,090
South Australia	59,235	6,220	166	334	6,720
Western Australia	152,029	11,414	1,152	2,420	14,986
Tasmania	159,747	8,983	915	1,820	11,718
Northern Territory	59,090	3,005	644	1,342	4,991
<hr/>					
Australia	2,472,308	151,519	9,277	12,806	173,602
Papua	308,134	17,112	784	1,227	19,123
<hr/>					
Grand Total	2,780,442	168,631	10,061	14,033	192,725

(c) *Island Stations.* Particulars of the island radio traffic dealt with during the year 1935-36 are given in the following table:—

RADIO TRAFFIC.—ISLAND STATIONS, 1935-36.

Particulars.	To Australia.	From Australia.	Inter- Island.	Ship.	Total.
	No.	No.	No.	No.	No.
Messages	27,336	21,796	23,270	1,888	74,290
Words	422,227	387,283	315,509	22,864	1,147,883

(v) *Proficiency Certificates.* Every station, in respect of which a licence is issued, must be operated by a person holding a certificate of proficiency.

During the year ended 30th April, 1937, 672 Operator's Certificates of Proficiency were awarded.

The number of each class was:—Commercial—First Class, 34; Second Class, 38; Third Class, 267; Broadcast, 95; and Amateur, 238.

CHAPTER VI. EDUCATION.

§ 1. Evolution of Educational Systems in Australia.

1. *Educational Systems of the States.*—(i) *Place of New South Wales in Australian Education.* The first settlement in Australia being in New South Wales, it is but natural that Australian Education should have had its beginning in that State. In the evolution of educational method and system in Australia also, New South Wales has played a leading part, and has had practically a dominating influence. The subject is dealt with in some detail in No. I. and No. II. issues of the Official Year Book, but it is not repeated in the present volume. (*See also par. 2 hereunder.*)

(ii) *Educational Systems of other States.* A more or less detailed account of the origin and development of the educational systems of the other States also appears in No. I. and No. II. issues of the Year Book.

(iii) *Medical Inspection of State School Children.* See Chapter IX.—Public Hygiene.

2. *Later Development in State Educational Systems.*—Preceding issues of the Official Year Book contained an outline of later developments of the educational systems of the various States (*see No. 22, pp. 426–29*), but owing to the necessity for economy it was not found possible to repeat this information in subsequent volumes.

Reference, however, may be made here to an interesting experiment tried in New South Wales in 1932. For many years, special consideration has been given to the backward child, but it has recently been recognized that, at the other extreme, the pupil of outstanding ability was also entitled to some special consideration. Children of superior ability were, therefore, selected by means of psychological and scholastic tests and grouped in classes where every opportunity is given them to progress at a rate in accordance with their natural ability. Special sixth classes for boys and girls were established at two of the metropolitan schools in 1932, and the scheme was extended in 1933 to include special fifth classes. Thus, on completion of the primary course, the pupils will have the benefit of two years in special classes. The results so far achieved by these classes have been sufficiently favourable to warrant the establishment of additional classes at Artarmon Public School in 1936.

As pointed out in previous issues, the educational system of New South Wales may now be considered as a more or less homogeneous entity, the various stages succeeding one another by logical gradation from kindergarten to university. In the other States development is proceeding on somewhat similar lines, activity in this respect being greatly helped by interstate conferences of directors of education and of inspectors and teachers as well as by the Council alluded to in par. 4 hereunder. At the Tenth Biennial Conference of Directors of Education held in Hobart in April, 1934, a comprehensive agenda was discussed, including matters affecting teachers generally, schools and courses, curriculum revision, extra-curricular activities, post-primary problems, vocational guidance and unemployment, educational research, school fees and uniformity in statistics.

3. *School Age.*—The statutory school age for children in each State, set out briefly, is as follows:—New South Wales, 7 to 14 years; Victoria, 6 to 14 years; Queensland, 7 to 14 years; South Australia, 6 to 14 years; Western Australia, 6 to 14 years; and Tasmania, 7 to 14 years.

It is provided in some States that in cases where any child is living outside stated distances from a State school, the age at which the child must commence school is increased. Provision is also made that a scholar having attained a certain standard may leave school before reaching the statutory leaving age.

4. *Australian Council for Educational Research.*—This Council, which was constituted on 10th February, 1930, is financed by the Carnegie Corporation of New York which has undertaken to provide payments at the rate of £7,500 a year for a ten

year period. The Council consists of nine members, of whom six are elected by State Institutes for Educational Research which have been established in each of the Australian States. One full meeting of the Federal body is held each year. The publications of the Council appear in the form of a Research Series published by the Melbourne University Press. Up to the end of 1936, 46 numbers had appeared. Since its inception the Council has granted 161 applications for assistance to persons who wished to carry out investigations, or have their works published. During the same period, the Council itself initiated a number of investigations, at the present time for example it has in Victoria a representative committee inquiring into the problems of education at the secondary stage. Expenditure on grants to the end of June, 1936, amounted to £13,559. In addition to organizing and supporting research, the Council acts as a centre for the collection and dissemination of information concerning Australian education. The Council was instrumental in arranging for the survey of Australian libraries conducted for the Carnegie Corporation during 1934 by Mr. Ralph Mann and Mr. E. R. Pitt. The Council published the report based on this survey. As a result of this report there are strong movements in several States aiming at the removal of the serious deficiencies revealed by the report in existing library services in Australia. In conjunction with the New Education Fellowship of England, the Council is arranging for an important educational conference in Australia in August, 1937. It is anticipated that over twenty leading educationalists from twelve different countries will participate. Sessions are to be held in each of the capital cities. The Council is recognized, by the Institute of Intellectual Co-operation, Paris, as the National Centre for Educational Information in Australia. It also acts as the Australian representative of the Institute of International Education, New York. The head-quarters of the Council are situated at 145 Collins-street, Melbourne.

§ 2. State Schools.

1. **General.**—The State Schools, or, as they are sometimes termed, the “public” schools, of Australia comprise all schools directly under State control, in contradistinction to the so-called “private” schools, the bulk of which, though privately managed, nevertheless cater for all classes of the community. Separate information regarding Technical Education is given in § 6, but the junior technical schools are included hereunder. The returns include figures relating to correspondence schools as well as subsidized schools, but evening schools and continuation classes where such are in existence, are not included, but are dealt with separately in par. 4 (iv) hereinafter.

2. **Returns for Year 1935.**—(i) *General.* The following table shows the number of State Schools, together with the teachers employed and the average enrolment and attendance in each State during the year 1935:—

STATE SCHOOLS.—RETURNS, 1935.

State or Territory.	Schools.	Teachers.	Enrolment.	Average Attendance.	Percentage of Attendance on Enrolment
New South Wales (a) ..	3,425	12,315	359,269	310,894	86.5
Victoria ..	2,754	8,533	237,802	208,803	87.8
Queensland ..	1,694	4,310	141,463	113,273	80.1
South Australia ..	1,093	3,218	82,087	75,100	91.5
Western Australia ..	872	2,340	58,232	52,555	90.3
Tasmania ..	523	1,307	33,509	29,162	87.0
Northern Territory (b) ..	7	14	341	309	90.6
Australia ..	10,368	32,037	912,703	790,186	86.6

(a) Including Federal Capital Territory.

(b) Year ended 30th June, 1936.

It would appear from the steadiness of the returns in recent years that the percentage of attendance on enrolment is approaching its maximum under present conditions in Australia. Recurring epidemics of contagious diseases, minor illnesses, bad weather and long distances are all serious factors limiting the full attendance of pupils at school.

The methods of calculating enrolment are not quite identical throughout the States, but the figures may be taken as representing the averages of the weekly enrolments of individual pupils. In the case of Queensland, however, the number of individual pupils attending school at any time during the year is the only figure available, and consequently the percentage of attendance is not comparable with those of the other States. The matter of securing uniformity in this respect has been under consideration for some time, and the Educational Research Council, alluded to in § 1, 4 *ante*, is devoting attention to the question of securing greater uniformity in methods of collection and presentation of educational data generally.

(ii) *Schools in the Federal Capital Area.*—(a) *General.* During the year 1935 twelve State Schools were in operation in the Federal Capital Territory. The individual pupils enrolled numbered 1,596 and the average attendance 1,252. Cost of upkeep amounted to £15,258. By arrangement with the Federal Government these schools are conducted by the New South Wales Education Department in the same way as the ordinary State Schools, the Department being recouped for expenditure. Ample provision has been made for both primary and secondary education, and this will be increased to meet requirements. The figures quoted, other than expenditure, do not include enrolment, etc., at the Trade School and the Evening Continuation School.

(b) *The Canberra University College* (see § 5 hereinafter).

3. *Average Attendance.*—The average attendance at the State Schools in Australia is shown below for the year 1891 and at varying intervals to 1935 :—

STATE SCHOOLS.—AVERAGE ATTENDANCE.—AUSTRALIA.

Year.	Total Population. (a)	Average Attendance.	Year.	Total Population. (a)	Average Attendance.
1891	3,421	350,773	1932	6,605	818,566
1901	3,825	450,246	1933	6,657	805,334
1911	4,574	463,799	1934	6,706	702,802
1921	5,511	666,498	1935	6,753	790,186
1931	6,553	817,262			

(a) At 31st December, in thousands.

It is possible, for Census years, to relate with reasonable accuracy the average attendance of scholars at State Schools to the number of children who are approximately of school age. For this purpose the ages 5 to 15 years, both included, have been taken and the average attendance per thousand children was :—1891, 455; 1901, 464; 1911, 477; 1921, 544; and 1933, 585. Although other factors might have affected the results in a minor degree it would appear that considerable improvement has taken place in school attendance during the last twenty years.

4. *Distribution of Educational Facilities.*—(i) *In Sparsely-settled Districts.*—(a) *General.* The methods adopted in the various States to carry the benefits of education into the remotest and most sparsely-settled areas are set out in some detail in previous issues of the Official Year Book (see No. 22, pp. 430–31). (b) *Correspondence Teaching.* Teaching by correspondence has been adopted to meet the needs of children out of reach of the ordinary means of education, including those incapacitated from attending school by reason of physical ailment. Nearly 18,400 children received instruction in this way during 1935, the respective numbers in each State being New South Wales, 7,521; Victoria, 1,149; Queensland, 5,745; South Australia, 1,793; Western Australia, 1,883; Tasmania, 274. In the Northern Territory, 25 children received tuition by correspondence during the year.

(ii) *Centralization of Schools.* The question of centralization of schools adopted so successfully in America and Canada has received some attention in Australia, and particularly in New South Wales. It is recognized that a single adequately staffed and well equipped central institution can give more efficient teaching than a congeries of small scattered schools in the hands of less highly trained teachers, and the small schools in some districts were therefore closed and the children conveyed to the central institution. The principle was first adopted in New South Wales in 1904, and in 1935 a sum of £16,576 was expended in boarding allowance and conveyance to central schools. Cost of conveyance to State Schools in Victoria during 1935-36 was returned as £13,197. In South Australia the sum of £4,709 was disbursed in connexion with travelling expenses of school children in 1935, while £15,705 was spent in Western Australia during 1934-35, and £6,178 in Tasmania in 1935-36. (It may be pointed out, however, that the parents are often reluctant to part with the small schools which form, as it were, "heart centres" in their little community, while the kindly help of the teachers is a great asset in the social and intellectual life of the districts served by the schools.)

(iii) *Education of Backward and Defective Children.* This subject was alluded to at some length in preceding issues of the Official Year Book (see No. 22, pp. 431-2).

(iv) *Evening Schools.* Evening Continuation Schools have been in existence for many years in some of the States, but their progress has been uncertain. The aim of these schools is to provide a means of furthering the education of those who have left school at the termination of the primary course. Practical and cultural subjects are combined in the curriculum to be of assistance to those attending in their occupations and their civic life. In New South Wales the 36 Evening Continuation Schools had an average weekly enrolment in 1935 of 4,138 and an average attendance of 3,142. The schools are divided into three groups, junior technical, domestic science, and commercial. Attendances at the schools for boys numbered 2,217, and at those for girls 925. Unemployed pupils receive free tuition, and all fees are refunded to others with a satisfactory record of attendance. In Western Australia evening continuation classes were held at 23 centres in 1930, with an average enrolment of 2,777 pupils, but the classes were discontinued at the end of that year and preparatory technical classes were substituted wherever there was a technical school in operation.

(v) *Higher State Schools.* In all the States higher schools have been established which provide advanced courses of instruction for pupils who have completed the primary grades. Reference to the development of these schools will be found in preceding Official Year Books (see No. 22, pp. 433-4).

(vi) *Agricultural Training in State Schools.* Extended reference to the methods adopted in the teaching of agriculture in State Schools was incorporated in preceding Official Year Books (see No. 22, pp. 434-7).

5. *Teachers.*—The number of teachers in the State Schools during 1935 is shown in the following table. The figures are inclusive of students in training and teachers of subsidized schools :—

STATE SCHOOLS.—TEACHING STAFF, 1935.

State or Territory.	Males.	Females.	Total.
New South Wales	5,846	6,409	12,315
Victoria	3,701	4,772	8,533
Queensland	2,254	2,056	4,310
South Australia	1,459	1,759	3,218
Western Australia	859	1,481	2,340
Tasmania	425	882	1,307
Northern Territory	5	9	14
	14,609	17,428	32,037

6. *Training Colleges.*—The development of the training systems of the various States was referred to at some length in earlier issues of the Year Book (*see* No. 22, pp. 437-9).

7. *Expenditure.*—(i) *Maintenance—All Schools.* The net expenditure on maintenance in all grades of schools, excepting senior technical schools and in Victoria and Tasmania junior technical schools, and the cost per head of average attendance for the five years ended 1935 are shown in the following table. The figures do not include expenditure on buildings, which is given separately in a subsequent table. In the case of Queensland allowance has been made in calculating cost per head of average attendance for the number of State scholarship holders attending non-State schools. In all expenditure tables the figures for Victoria and Western Australia relate to the financial year ending six months later than the stated calendar year.

STATE SCHOOLS.—EXPENDITURE ON MAINTENANCE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Ter.	Total.
TOTAL (INCLUDING SECONDARY SCHOOLS).								
1931	£ 3,781,614	£ 2,145,573	£ 1,168,195	£ 762,934	£ 472,318	£ 227,466	£ 5,686	£ 8,563,786
1932	3,529,989	2,099,758	1,251,037	702,306	523,010	206,957	4,471	8,317,528
1933	3,267,223	2,098,686	1,296,206	703,722	543,517	203,860	4,303	8,117,517
1934	3,312,614	2,163,111	1,312,758	666,593	575,340	215,105	3,897	8,249,418
1935	3,523,552	2,335,096	1,235,724	721,275	625,847	250,759	5,594	8,697,847

PER HEAD OF AVERAGE ATTENDANCE.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931	11 14 3	9 18 11	9 17 2	9 14 1	8 16 2	7 10 0	15 18 3	10 9 2
1932	10 18 8	9 14 4	10 10 6	8 19 4	9 15 4	6 19 11	15 19 4	10 3 3
1933	10 6 6	9 14 9	11 10 10	9 1 9	9 19 2	6 15 1	13 12 4	10 1 7
1934	10 13 9	10 5 10	11 11 8	8 14 7	10 15 1	7 6 9	14 5 6	10 8 1
1935	11 2 8	11 3 7	10 18 2	9 12 1	10 18 11	8 12 0	18 2 1	11 0 2

The expenditure on State Schools which had been on a rising scale for some years in all States reached its maximum of £10,087,570 in 1920. The economic depression was responsible for heavy reductions in subsequent years, but the expenditure is again expanding.

(ii) *Maintenance—Secondary Schools.* The figures given in the preceding table refer to expenditure on maintenance of all State primary and secondary schools, exclusive of technical colleges. It has been thought desirable by the State Education Departments to give separate information in regard to the cost of secondary education. The difficulty of making any satisfactory allocation of the kind, however, will be understood when it is realized that both elementary and higher education are in some instances given in the same school and by the same teacher. Unfortunately too, the term "secondary" does not indicate the same thing in all States. It might be mentioned here that similar difficulties arise in connexion with the apportionment amongst the various branches of expenditure on administration, inspection and the training of teachers. The figures quoted in regard to cost hereunder have been extracted from the Reports of the State Education Departments, and are subject to the qualifications above enumerated.

STATE SECONDARY SCHOOLS.—EXPENDITURE ON MAINTENANCE, 1935.

	State.	Cost.	Cost Per Head of Population.
		£	s. d.
New South Wales	577,035	4 4
Victoria	307,457	3 4
Queensland	124,006	2 7
South Australia	98,905	3 5
Western Australia	(a) 132,590	5 11
Tasmania	18,508	1 7

(a) Year 1934-35.

The figures in all cases are exclusive of cost of buildings. In the case of Victoria the total includes the expenditure on "intermediate" education amounting (excluding administration costs) to £105,016. For Queensland, the figure quoted does not include the cost of the Agricultural High School and College, which amounted in 1935 to £19,774. For Western Australia the total includes £82,120 on account of "post primary" education.

(iii) *Buildings.* Expenditure on school buildings exclusive of Technical Colleges in each of the years quoted was as follows :—

STATE SCHOOLS.—EXPENDITURE ON BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Ter.	Total.
	£	£	£	£	£	£	£	£
1931	416,217	43,817	44,462	22,471	56,267	10,719	122	594,073
1932	178,532	51,947	152,792	33,822	40,424	4,718	122	462,357
1933	360,194	94,850	213,181	52,697	52,955	9,926	156	783,959
1934	300,999	104,591	285,358	44,120	66,515	24,973	54	826,610
1935	406,662	132,744	347,735	60,656	102,634	53,589	897	1,104,917

The totals for the various States in 1935 include the following amounts expended from loan and unemployment relief funds :—New South Wales, £69,707 ; Victoria, £20,900 ; Queensland, £24,495 ; South Australia, £31,079 ; Western Australia, £74,370 ; and Tasmania, £25,155.

(iv) *Total.* The net total cost during the year 1935 was as follows :—

STATE SCHOOLS.—NET TOTAL COST, 1935.

Item.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Ter.	Total.
	£	£	£	£	£	£	£	£
Net cost of education, including buildings	3,930,214	2,467,840	1,583,459	781,931	728,481	304,348	6,491	9,802,764

The figures in this and the preceding tables refer to all grades of State Schools (with the exception of senior technical schools and in Victoria and Tasmania junior technical schools). Including buildings, the net cost per scholar in average attendance for the whole of the State schools in Australia amounted in 1935 to £12 8s. 1d., as compared with £4 9s. 3d. in 1901.

8. *School Banking*.—With the object of inculcating principles of thrift amongst the children, agencies of the Savings Banks have been established at many of the schools throughout the Commonwealth. Particulars for each State at 30th June, 1936, were as follows :—

SCHOOL SAVINGS BANKS AT 30th JUNE, 1936.

State.	Agencies.			Depositors.	Amount on Deposit.	Average for Depositor.
	No.	No.	£			
New South Wales	2,622	168,901	228,880	1 7 1		
Victoria	2,730	193,717	281,304	1 9 0		
Queensland	(b)	91,103	162,119	1 15 7		
South Australia (a)	1,210	73,573	121,383	1 12 11		
Western Australia	808	69,415	78,122	1 2 6		
Tasmania	488	28,954	41,373	1 8 11		
Total	7,858	625,663	913,181	1 9 2		

(a) At 31st December, 1935.

(b) Not available.

§ 3. Private Schools.*

1. *Returns for 1935*.—The following table shows the number of private schools, together with the teachers engaged therein, and the enrolment and average attendance in 1935 :—

PRIVATE SCHOOLS, 1935.

State or Territory.	Schools.	Teachers.	Enrolment.	Average Attendance.
New South Wales	746	4,740	92,750	81,144
Victoria	518	2,501	71,472	62,529
Queensland	218	1,372	32,538	27,775
South Australia	178	889	13,573	12,140
Western Australia	149	590	13,232	11,688
Tasmania	65	324	5,828	5,148
Northern Territory (a)	1	5	132	115
Total	1,875	10,421	229,525	200,539

(a) Year ended 30th June following.

The figures for Queensland include the returns from Grammar Schools, of which there are ten—six for boys and four for girls, with an enrolment of 1,180 boys and 580 girls. These schools are governed by boards of trustees, partly nominated by Government, and partly by the subscribers to the funds. The trustees make regulations regarding the fees of scholars, the salaries of teachers, and generally for the management of the schools. The Government endowment received in 1935 amounted to £15,402. In addition, a sum of £12,801 was received by way of fees for the tuition of State scholarship holders. The Grammar schools are inspected annually by officers of the Department of Public Instruction.

* Private schools include all schools not wholly under State control. The term "private," though popularly applied, is, of course, a misnomer.

2. Growth of Private Schools.—The enrolment and average attendance at private schools in 1891 and at varying intervals to 1935 were as follows:—

PRIVATE SCHOOLS.—ENROLMENT AND ATTENDANCE.

Year.	Enrolment.	Average Attendance.	Year.	Enrolment.	Average Attendance.
1891	124,485	99,588	1931	221,387	189,665
1901	148,659	120,742	1932	220,723	188,912
1911	160,794	132,588	1933	222,625	189,984
1921	198,688	164,073	1934	223,538	196,927
1930	242,024	193,691	1935	229,525	200,539

3. Registration of Private Schools.—Conditions in regard to the registration of private schools were alluded to in previous Year Books (*vide* No. 18, p. 451).

§ 4. Free Kindergartens.

The following information regarding Free Kindergartens has been compiled from particulars supplied by the principals of the chief institutions or the organizing secretary in each State, except in the case of Western Australia where the details were furnished by the Education Department:—

FREE KINDERGARTENS, 1936.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.	Voluntary Assistants.
New South Wales ..	16	870	38	43	63
Victoria	33	1,637	74	41	341
Queensland	6	(a) 562	13	16	6
South Australia ..	10	395	13	26	40
Western Australia ..	7	365	17	9	20
Tasmania	3	85	6	1	1
Total	75	3,914	161	136	471

(a) Estimated.

The kindergartens in the above table are all in the metropolitan areas of the various States, with the exception of three country centres, two at Geelong and one at Ballarat, which are included in the Victorian returns. The average attendance at these country schools in 1936 was 149 children. In each capital city there is a training college and the number of students in training during 1935 was 80 in Sydney, 41 in Melbourne, 16 in Brisbane, 9 in Adelaide, 9 in Perth, and 1 in Hobart.

The information given above refers to institutions under private kindergarten unions or associations, and is exclusive of the kindergarten branches in the Government schools of the various States.

§ 5. Universities.

1. **Origin and Development.**—A brief account of the origin and development of the Universities in the various States is given in preceding issues of the Official Year Book (*see* No. 22, pp. 442-3).

2. **Teachers and Students.**—The following table shows the number of professors and lecturers, and the students in attendance at each of the State Universities during the year 1935:—

UNIVERSITIES.—TEACHERS AND STUDENTS, 1935.

University.	Professors.	Lecturers and Demonstrators.	Students attending Lectures.		
			Matriculated.	Non-matriculated.	Total.
Sydney	49	188	2,604	425	3,029
Melbourne	36	194	(c)	(c)	(a) 3,071
Queensland (Brisbane) ..	14	75	918	171	1,089
Adelaide	19	114	1,116	956	(b) 2,072
Western Australia (Perth) ..	13	44	785	2	787
Tasmania (Hobart) ..	9	22	186	43	229

(a) Exclusive of 217 students at Conservatorium of Music.

(b) Exclusive of 262 students at Conservatorium of Music.

(c) Not available.

The Conservatorium in Sydney, while attached to the Education Department, is not under the control of the University.

3. **University Revenue.**—The revenue of the Universities is derived principally from Government aid, the fees of students, and income from private foundations. The receipts from all sources other than new bequests during the year 1935 are set out in the table below. With the exception of New South Wales, receipts from public examinations are included as University revenue under lecture and examination fees. In South Australia Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute. The returns for Western Australia are exclusive of the private foundations account as these figures are not made available by the University authorities.

UNIVERSITIES.—REVENUE, 1935.

University.	Government Grants.	Lecture and Examination Fees.	Income from Private Foundations.	Other.	Total.
	£	£	£	£	£
Sydney	57,950	74,640	68,920	5,300	205,910
Melbourne	55,550	96,443	29,536	22,024	203,553
Queensland (Brisbane) ..	25,118	22,663	17,822	2,331	67,934
Adelaide	55,100	28,236	22,767	5,469	111,572
Western Australia (Perth) (a)	26,549	1,379	1,597	4,853	34,378
Tasmania (Hobart) ..	12,770	4,042	1,141	900	18,853
Total	232,137	227,403	141,783	40,877	642,200

(a) Excludes revenue on account of bequests, endowments, &c., not taken into general account.

The figures in the above table do not include the value of new foundations received during the year which amounted to £8,507 in Victoria, £3,877 in Queensland, £3,267 in South Australia, and £196 in Tasmania.

In preceding issues of the Official Year Book information was given in some detail in regard to the extent to which the Universities have benefited from private munificence. Space will permit of reference to the more important benefactions only herein.

The endowments to the Sydney University include the Challis Fund, £380,025; the G. H. Boscch Fund, £252,848; the P. N. Russell Fund, £104,771; and the Fisher Estate, £42,610. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of the latter, the credit balances of the private foundations amounted to £1,257,318 on the 31st December, 1935. In 1930 a sum of £100,000 was received from the Rockefeller Foundation in aid of the building and equipment of a clinical laboratory for the medical school. Mr. Sidney Myer's gifts to the Melbourne University amounted to £60,000, while Sir Samuel Gillott, Mr. Edward Wilson (Argus Trust), and Sir Samuel Wilson contributed £41,000, £34,000, and £30,000 respectively. Mr. R. B. Ritchie's gifts for the endowment of a Chair of Economics amounted to £30,000, and a similar sum was received from the Supreme Court Library Fund for the endowment of a Chair of Public Law. Dr. James Stewart founded Scholarships in Anatomy, Medicine and Surgery to the value of £26,000. The Hon. Francis Ormond contributed £20,000 to the University as well as benefactions to Ormond College amounting to considerably over £100,000. Queensland University, to the 28th February, 1937, had received £161,292 from the McCaughey estate, and £32,071 from the Walter and Eliza Hall Trust, while the Hon. T. C. Beirne gave £20,000 in 1935 for the endowment of a chair of Law in Queensland. The chief benefactors to the Adelaide University were Sir Thomas Elder, £100,000; Sir Langdon Bonython, £71,000; Mr. T. E. Barr Smith, £35,000; Mrs. Jane Marks, £30,000; Family of John Darling, £25,000; and R. B. Smith and family, £21,000. Several valuable properties, in addition to shares which realized £58,450, were also bequeathed to this University by Mr. Peter Waite, the total value of the bequest being estimated at £100,000. Under the will of Sir Winthrop Hackett the University of Western Australia received £425,000, while the late Robert Gladden bequeathed an estate valued at £60,000.

4. University Expenditure.—The principal item of University disbursements consists of salaries. In the following table is given the expenditure incurred during 1935, excluding capital expenditure on buildings:—

UNIVERSITIES.—EXPENDITURE, 1935.

University.	Salaries.	Scholarships and Bursaries.	Buildings and Grounds. (d).	Maintenance, Equipment, &c.(c)	Total.
	£	£	£	£	£
Sydney	158,764	7,000	3,340	32,238	201,342
Melbourne	134,380	3,407	8,194	31,580	200,573
Queensland (Brisbane) ..	39,503	1,681	374	22,155	63,713
Adelaide (b)	66,044	1,159	1,186	40,798	109,187
Western Australia (Perth) (a)	24,817	..	66	9,656	34,539
Tasmania (Hobart) ..	12,661	1,017	712	4,048	18,438
Total	434,175	19,264	13,872	160,481	627,792

(a) Excludes expenditure on account of bequests, endowments, &c., not taken into General Account.

(b) Includes salaries, £15,770; and maintenance and equipment, £12,012 in respect of the Waite Agricultural Research Institute.

(c) Including expenses of public examinations for all States other than New South Wales.

(d) Excluding capital expenditure on new buildings.

Capital expenditure on new buildings during 1935 amounted to £79,552 distributed as follows:—Victoria, £2,438; Queensland, £22,562; South Australia, £19,446; and Western Australia, £35,106.

5. **University Extension.**—Some account of the initiation and progress of university extension is given in preceding Official Year Books (*see* No. 22, p. 446).

6. **The Canberra University College.**—The question of the establishment of a University at the Federal Capital is still under consideration, and in the meantime a University College has been established under the Canberra University College Ordinance 1929–1936. By virtue of a temporary regulation of the University of Melbourne, which expires on the 31st December, 1940, the College is empowered to provide approved lectures in the subjects of the Arts, Science, Commerce and Law courses in preparation for certain degrees and diplomas of that University. Lectures commenced in 1930 with the aid of several part-time lecturers, and 30 students were enrolled during the year. The curriculum has since been extended and three full-time and eight part-time lecturers have been appointed. In 1935 and 1936 the students numbered 75 and 81 respectively. The examinations are conducted by the University of Melbourne.

7. **Workers' Educational Association.**—In 1913 Workers' Educational Associations were formed in all the States of Australia, and later in New Zealand. The movement has for its object the bringing of the University into closer relationship with the masses of the people, and thereby providing for the higher education of the workers in civic and cultural subjects. There are now direct grants from all State Governments except Western Australia. The particulars of grants for classes in 1936 were as follows:—New South Wales, £3,866, 57 classes and 4 study circles; Victoria, £3,120, 34 tutorial classes and extension work; Tasmania, £691, 13 classes; South Australia, £2,025, 7 tutorial classes, 21 lecture classes, 4 study circles and extension lectures at country centres; Queensland, £1,650, 17 classes. In addition, the New South Wales Association receives a Government grant for general organizing purposes of £500, paid on the basis of £1 for £1 on subscriptions and donations up to this amount. The Queensland and South Australian Associations received grants of £850 and £240 respectively. The Carnegie Corporation has in recent years shown its interest in the work by allotting substantial grants to the Associations and to the Universities. The principal subjects chosen in all States are Industrial History, Economics, Political Science and Sociology, but there is an increasing number of classes in other subjects such as History, Psychology, Philosophy, Literature, Music, Physiology and Biology. Each University co-operates with the W.E.A. in the formation of a joint committee for tutorial classes, which supervises the work with the assistance of a University officer with the title of Director of Tutorial Classes. In addition to the longer University tutorial classes, many preparatory classes, study circles, and summer schools are organized by the Association, numerous courses of public lectures are delivered, educational conferences promoted, and an extensive book service is spreading educational literature throughout Australia.

§ 6. Technical Education.

1. **General.**—Although provision has been made in all of the States for many forms of technical education, the total provision made would imply that this branch of education has not been regarded as of outstanding importance. As will be seen later the expenditure on technical education for the whole of Australia is comparatively small. In preceding issues of the Official Year Book an outline was given of the origin and development of technical education in each State (*see* No. 22, pp. 447–51), but considerations of space preclude the inclusion of more up-to-date information in later volumes.

2. Returns for Year 1935.—Returns for the year 1935 in regard to enrolments and attendances, etc., in each State are given in the table hereunder:—

TECHNICAL EDUCATION.—ENROLMENTS, ETC., 1935.

State.					Teachers.	Net Enrolments.	Fees Received.
							£
New South Wales	..	..	..	..	601	19,959	27,481
Victoria (a)	..	..	..	..	998	28,193	60,013
Queensland	..	..	..	..	378	13,492	14,518
South Australia	..	..	..	..	239	8,339	12,904
Western Australia	..	..	..	..	141	4,542	2,111
Tasmania (a)	..	..	..	..	114	1,517	1,666
Total	..	..	..	..	2,471	76,042	118,693

(a) Includes junior enrolments, viz., 8,185 in Victoria and 431 in Tasmania, as teaching staff and expenditure cover both senior and junior sections.

Figures for earlier years will be found in preceding volumes. Owing to the considerable differences in scope and methods in the States, and in the presentation of the returns in connexion therewith, effective comparison of the results is somewhat difficult. The practice which has been in operation for several years of permitting students unable to pay fees to defer payment was continued during 1935. As a result of improved conditions the number applying for this concession is steadily diminishing. In Victoria, school councils are empowered to grant, up to 10 per cent. of the number of fee-paying students, free admission to classes to qualified unemployed applicants whose parents are unable to afford the necessary fees. Towards the end of the year 1931 the Education Department in Queensland, in conjunction with the Department of Labour and Industry, established a series of free classes in various centres for unemployed young men and women, and these classes were continued in 1935.

3. Expenditure on Technical Education.—The expenditure on technical education in each State for the year 1935 is shown below:—

TECHNICAL EDUCATION.—EXPENDITURE, 1935.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1935 { (a)	172,232	280,867	68,935	52,258	20,889	18,010	613,191
(b)	20,637	22,511	3,906	608	2,393	33	50,148

(a) Maintenance.

(b) Buildings.

In addition to the amount shown above for Victoria, fees collected in that State totalling £60,013 were retained and spent by the Technical School Councils. Similar receipts in the other States were practically all paid into Consolidated Revenue, and should be deducted from the above figures to obtain the respective net expenditures.

The expenditure on maintenance for technical education in 1935 amounted to 1s. 10d. per head of the population of Australia, as compared with 25s. 8d. per head expended in maintenance for primary and secondary education.

§ 7. Business Colleges and Shorthand Schools.

There has been a considerable development in recent years both in the number and scope of privately conducted institutions which aim at giving instruction in business methods, shorthand, typewriting, the use of calculating machines, etc. Particulars for all States, so far as they are available, are given in the following table. Owing to the varying methods employed in the States it is not possible to give any comparative figures of enrolment:—

BUSINESS COLLEGES, SHORTHAND SCHOOLS, ETC., 1935.

State.	Schools.	Teachers.	Average Attendance of Students.	
			Males.	Females.
New South Wales	35	244	1,680	3,608
Victoria	13	134	2,613	2,547
Queensland	9	30	147	401
South Australia	8	38	703	1,076
Western Australia	11	54	(a) 1,593	(a) 582
Tasmania	4	22	108	454
Total	80	522	6,844	8,668

(a) Estimated.

The figures for New South Wales are exclusive of students instructed at home through the medium of correspondence classes. Particulars regarding fees received in 1935 are available for Western Australia and Tasmania only, the respective figures being £30,863 and £5,326.

§ 8. Miscellaneous.

1. *Scientific Societies.*—(i) *Royal Societies.* In previous issues of the Official Year Book an outline was given of the origin and progress of the Royal Society in each State (see No. 22, pp. 454-5). The accompanying table contains the latest available statistical information regarding these institutions, which in every case have their head-quarters in the capital cities.

ROYAL SOCIETIES.—PARTICULARS, 1936.(a)

Heading.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
Year of origin	1866	1854	1884	1853	1897	1843
Number of members ..	283	197	200	154	176	232
Vols. of transactions issued	69	77	48	55	22	70
Number of books in library	36,000	18,000	6,400	8,000	4,700	20,000
Societies on exchange list ..	351	333	200	265	150	264
Income £	1,060	423	189	504	211	372
Expenditure £	872	416	152	453	230	384

(a) The Royal Society of Australia, with head-quarters at Canberra, was founded on the 25th July, 1930, and received permission to use its title on the 14th January, 1931. The members, including associates, numbered 82 in 1936. Income and expenditure for the year amounted to £64 and £10 respectively.

(ii) *The Australian and New Zealand Association for the Advancement of Science.* This Association was founded in 1887. Its head-quarters are at Science House, Gloucester-street, Sydney, and meetings are usually held biennially within the various States and in the Dominion of New Zealand. The next meeting will be held at Canberra in January, 1939. The library of the Association contains 4,000 volumes, and is now housed by the Council for Scientific and Industrial Research.

(iii) *Other Scientific Societies.* The Linnean Society of New South Wales, with head-quarters in Sydney, was founded in 1874. The soundness of its present position is due to the benefactions of Sir William Macleay, who during his lifetime and by his will endowed the Society to the amount of £67,000, which has been increased by judicious investment to over £80,000. The Society maintains a research bacteriologist and offers annually 4 research fellowships in various branches of natural history. Four fellowships were awarded in 1936. The library comprises some 14,000 volumes, valued at about £7,000. Sixty-one volumes of proceedings have been issued, and the Society exchanges with some 232 kindred institutions. The ordinary membership at the end of 1936 was 180.

The British Astronomical Society has a branch in Sydney, and in each of the States the British Medical Association has a branch.

In addition to the societies enumerated above, there are various others in each State devoted to branches of scientific investigation.

2. *Libraries.*—(i) *Commonwealth*—(a) *Parliamentary and National Library.* When the Commonwealth Parliamentary Library was created in 1902, it was recognized that at such time as the Federal Capital was established it would be necessary to have available there, for the use of Members, Government Departments and the public, a library sufficient for their requirements, and therefore wider in scope than would be the case with a purely Parliamentary Library. The ideal of a great general library was kept in view, and standard works were systematically acquired. At the same time, the first Library Committee conceived the idea of a National Library for the use and benefit of the people of Australia. The policy was therefore pursued of securing, as far as possible, all works and documents connected with the discovery, settlement and early history of Australia, New Zealand and the Pacific Islands.

In 1909 a valuable collection of *Australiana*, comprising about 10,000 volumes and 6,500 pamphlets, maps, documents and pictures—the library of Mr. E. A. Petherick—was acquired. In 1912 a provision was included in the Commonwealth Copyright Act requiring the publisher of every book, pamphlet, etc., printed in Australia to supply a copy free to the Library. In the same year the publication of the *Historical Records of Australia* was begun, and 34 volumes were issued before publication was temporarily suspended in 1926.

The rapid development of the Australian and National sections of the Library persuaded the Library Committee in 1923 that the title "Commonwealth National Library" should be given to those sections, and that at Canberra a division of the Parliamentary and National collections should be effected, the former to be housed in Parliament House, the latter in a separate building to which the public would be given free access. The erection of the first wing of the permanent National Library building has been completed, and it is designed to meet the requirements of University students and the general public, to whom the privileges of the Library have been extended in respect to borrowing as well as reference. The design for the complete building makes ample provision for the housing of special collections and for the proper display of the valuable records of Australian history which the Library possesses. In 1930 a further development in the scope of the National Library was the establishment of an Historical Film and Speaking Record Section. This is being developed in co-operation with the Department of Commerce and is controlled by a Committee consisting of the Librarian, the Officer-in-Charge of the Cinema and Photographic Branch of the Department of Commerce, and a representative of the Film Industry—Mr. S. S. Crick.

The work of the National Library was also extended in 1936 as the result of a grant of \$7,500 in three annual instalments of \$2,500 from the Carnegie Corporation of New York for the establishment of library and reading facilities to outlying Commonwealth

Territories. Arrangements have now been completed for the circulation of books by the National Library to the Northern Territory, Papua, New Guinea, Central Australia, Norfolk Island and Nauru.

The number of volumes in the National and Parliamentary collections—both of which are under the same administration—was, at the end of June, 1936, 124,531 books and 8,100 pamphlets, the outstanding feature of the National collection being a unique collection of Captain Cook manuscripts, while the Parliamentary section contains an extensive series of official publications of Great Britain, the Dominions and Foreign countries.

(b) *Patents Office Library.* The free library attached to the Commonwealth Patents Office, Canberra, contains over 50,000 volumes. Patent specifications are received from the principal countries of the world, together with official publications dealing with Patents and Trade Marks. A wide range of technical literature and periodicals is available.

(ii) *States.* In each of the capital cities there is a well-equipped Public Library, the institutions in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere. The following statement gives the number of volumes in the Public Library of each capital city at the 30th June, 1936 :—

METROPOLITAN PUBLIC LIBRARIES, 1935-6.

City.	Number of Volumes in—			Total
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra (h)	114,531	10,000	(i)	124,531
Sydney (a)	401,986	(b)	81,421	483,407
Melbourne (c)	421,830	70,960	14,740	507,530
Brisbane	38,755	..	..	38,755
Adelaide	173,823	(f)	(g) 3,513	177,336
Perth	148,607	..	(d) 25,409	174,016
Hobart (c).. ..	34,333	(e) 7,997	..	42,330

(a) Including 137,712 volumes in the Mitchell Library. (b) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred in 1935 to the Municipal Council. At 31st December, 1935, the books numbered 10,000. (c) Year ended 31st December, 1935. (d) Includes 6,055 volumes in School Children's Travelling Branch. (e) Includes 1,000 volumes in the Children's Branch. (f) The Adelaide Circulating Library, at 30th June, 1936, contained 88,000 books. (g) Children's Branch. (h) Includes Parliamentary section. (i) books are loaned to libraries or students throughout Australia whenever necessary for research work.

In connexion with the Country Lending Branch of the Sydney Public Library, it may be noted that books are forwarded on loan to State schools, to approved associations, to Schools of Arts and to individual students. During the year 1935-36, about 70,000 books were lent to small State schools, 18,000 to Schools of Arts, 6,400 to branches of the Teachers' Federation and 2,000 to Agricultural Bureaux, while 55,000 reference works were loaned to individual country students.

A special research staff attached to the Public Library gives valuable assistance in making readily available to inquirers the store of information contained in books, etc., which, owing to limitations of space, are not in open access. About 6,830 books and periodicals were added to the library in 1935-36.

The Mitchell Library in Sydney of more than 60,000 volumes and pamphlets, and 300 paintings, principally relating to Australasia, and valued at £100,000, was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. The testators stipulated that the regulations of the British Museum were to be adopted as far as practicable, hence the library is the resort of specialists. There are now 138,000 volumes in the library in addition to valuable manuscripts, collections of Australian postage and fiscal stamps, and various pictures, coins, etc.

Amongst other important libraries in New South Wales may be mentioned the library at the Australian Museum, 28,000 volumes; the Teachers' College Library, 48,800; Sydney Technical College library, 18,500; Public School libraries, 499,000; and the Cooper Library of the New South Wales Public School Teachers' Federation and the library at the Botanic Gardens, each of 10,000 volumes. At the end of 1935 the Parliamentary Library contained 81,500 volumes.

The reading room at the Melbourne Public Library ranks among the finest in the world. It was opened in 1913, and has a diameter of 114 feet, with a similar height, and is capable of seating 320 readers at a time, all of whom are under observation from the centre of the room. The Library forwards volumes on loan to Mechanics' Institutes and Free Libraries, and to individual borrowers in the country. Railway transport is used as far as possible in transporting the volumes. During the year 1935 the volumes added to the Reference branch by purchase, donation, etc., numbered 9,300, while additions to the lending branch numbered 570.

For some years past efforts have been made in South Australia to collect original documents likely to be of service in compiling a history of the State. So far back as 1914, Professor Henderson, of Adelaide University, under commission from the South Australian Government, visited and reported on the system of keeping archives in England, France, Belgium, Holland and Ceylon, and obtained valuable information also from the United States and Canada. A department of historical documents has been created under the care of an archivist, and valuable work has been done in connexion with examination, classification and permanent preservation of the available papers. A suitable building for housing the documents and the staff was provided in 1921. At the 30th June, 1936, the collection numbered 303,288 documents, 14,280 views and 1,363 maps.

For the year ended 30th June, 1936, accessions to the Public Library at Perth numbered 3,551 books including bound volumes of periodicals.

During 1922 the Tasmanian Public Library adopted the plan of lending books to individual country borrowers and to families or committees of residents in country districts. The Public Library at Launceston contains 42,000 volumes. Books added to the Public Libraries at Hobart and Launceston during the year 1935 numbered 3,307 and 1,276 respectively.

Statistics in regard to other libraries are not available for all States, while the information supplied is not in all cases complete. Returns for Victoria in 1935 showed a total of about 420 libraries in receipt of State or municipal aid, but apart from the Melbourne Public Library statistics are now only collected from 25 institutions in Greater Melbourne and 47 in the chief extra metropolitan towns. These libraries contained approximately 495,000 volumes. Queensland returned a total of 216 libraries, with 567,148 books, although during 1935-36 libraries other than the State Public Library did not receive Government aid. Although 268 suburban and country institutions were recorded in South Australia during 1935 statistics were collected from only 245 which held 700,000 volumes, while in Tasmania 86,500 volumes were distributed between 28 Government and the 160 affiliated and extension public institutions.

(iii) *University Libraries.* The libraries of the Australian universities perform two important functions in Australian life and development: they provide material not only for the education of graduates and under-graduates, but for scholars, research workers and practical investigators all over the continent, some no genuine student is refused access to them. Much of the material they contain is not available elsewhere, for although in most cases similar, they are in many directions more highly specialized than the public libraries, whose resources they are thus able to supplement. They lend to one another and to State and private institutions as well as to individual investigators, and they both lend to and borrow from the public and scientific libraries. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professorial staff. In size the library of the University of Sydney is the third in Australia, and the libraries of the Universities of Adelaide and Melbourne are respectively seventh

and eighth. The following table shows the sizes and rates of growth of the Australian university libraries; it is impossible to give borrowing statistics, as they differ too widely to be comparable without much explanation:—

UNIVERSITY LIBRARIES, 1936.

University.					Number of Volumes.	Yearly Accessions.	Number of Current Periodicals.
Sydney	..	..	..	..	230,150	6,150	2,763
Melbourne	..	..	..	..	98,000	5,200	1,250
Queensland	..	..	..	..	42,550	2,150	670
Adelaide	..	..	..	..	105,000	3,000	1,700
Western Australia	..	..	..	..	45,500	2,500	450
Tasmania	..	..	..	..	(a) 44,800	(a) 3,900	300

(a) Including pamphlets.

The first books were bought for the library of the University of Sydney as early as 1851; only since 1910, however, has it possessed a building of its own. It is named after its principal benefactor, Thomas Fisher, who bequeathed to it in 1885 the sum of £30,000. It contains an up-to-date bookstock of glass and steel, but the design of the otherwise fine reading room is such as to make it difficult to install a satisfactory system of shelving; the library is therefore conducted on the closed access system. Undergraduates, however, as well as graduates and members of the teaching staff, are encouraged to borrow freely. The library possesses a large number of periodicals, especially scientific, valuable collections of seventeenth century pamphlets and Elizabethan translations from the classics, and an extensive collection of Australian literature. Besides a medical branch, there are a number of departmental libraries.

Early in 1854 the Council of the University of Melbourne made its first allocation for books, but the library was housed in temporary and unsatisfactory quarters for a number of years, and consequently, growth was slow and complaints frequent. In recent years the University authorities have treated the library generously, and there have been some welcome benefactions, but accommodation is insufficient and a new library building is one of the most pressing needs of the University. All the books are accessible on open shelves, and though the library is intended primarily for reference purposes, borrowing, except of text-books and certain valuable volumes, is made as easy as possible. There are branches in the science departments, and a separate medical library.

The Library of the University of Queensland began 20 years ago with £3,000 worth of books, £2,000 having been raised by public subscription and £1,000 granted by the Government. At present it shares a building with a science department. There are several departmental libraries.

The Adelaide University Library bears the name of its original benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the University about £50,000 for library purposes. Some 20,000 volumes are shelved in the reading room, and available to the ordinary student. Up-to-date steel bookstacks provide accommodation for about 100,000 volumes, and additions now planned will be capable of housing a further 500,000. At present borrowing by students is restricted to honours and post graduate research students. There are medical, law and departmental libraries.

In the University of Western Australia the first permanent library staff was not appointed until 1927, and the library remained in cramped and unsuitable quarters until 1931, when it was housed in a wing of the new buildings at Crawley. Even this accommodation is no longer adequate, and a permanent library building is being planned for the near future. A special feature is the use made of student co-operation. The whole collection is accessible on open shelves, and there are several departmental libraries.

The Library of the University of Tasmania was founded in 1893, but for many years it comprised little more than a collection of text-books. In 1913 a substantial increase of funds was allotted and important gifts received. In 1919 it was organized for the first time in accordance with modern library practice. Its growth has been steady since 1925.

3. Public Museums and Art Galleries.—Previous issues of the Official Year Book contained a brief description of the public museums and art galleries in each State (*see* No. 22, pp. 457-9), but considerations of space preclude the incorporation of this matter in the present volume.

4. State Expenditure on Education, Science and Art.—The expenditure in each State on education, science and art during the year 1935-36 is given in the following table. Owing to the details not being available in all States the figures are exclusive of officers' pensions and interest and sinking fund on capital expended on buildings. The cost of the medical inspection of school children is also excluded, as this service is more appropriately classified under Public Health, etc. :—

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1935-36.

State.	Expenditure from—				Receipts.*	Net Expenditure.
	Revenue.	Loan.	Other Funds.	Total.		
	£	£	£	£	£	£
New South Wales	4,259,401	a 243,255	..	4,502,656	92,334	4,410,322
Victoria ..	2,764,375	7,866	76,913	2,849,154 ^b	71,715	2,777,439
Queensland ..	1,553,431	246,662	(c) 48,436	1,848,529	21,163	1,827,366
South Australia ..	972,352	40,432	..	1,012,784	50,064	962,720
Western Australia	758,862	75,042	..	833,904	25,710	808,194
Tasmania ..	325,113	27,852	..	352,965	122	352,843
Total ..	10,633,534	641,109	125,349	11,399,992	261,108	11,138,884

(a) Includes £70,000 from the Unemployment Relief Fund in Special Deposits Account. (b) In addition fees in respect of technical education amounting to £20,000 were received and spent by the School Councils. (c) From Unemployment Relief Fund.

CHAPTER VII.

PUBLIC JUSTICE.

§ 1. Police.

1. *General*.—In early issues of the Year Book (*see* No. 4, p. 918) a résumé was given of the evolution of the police force in Australia up to the passing of the Police Act of 1862 (25 Vic. No. 16) in New South Wales.

2. *Strength of Police Force*.—(i) *General*. The strength of the police force in each State during the five years ended 1935 is given in the table hereunder. It may be mentioned that the police forces (with the exception of the small body of Commonwealth police maintained in the Northern Territory and at the Federal Capital) are entirely under State control, but, by arrangement, the Commonwealth Government utilizes their services in various directions, such as the collection of particulars for Commonwealth electoral rolls, etc.

POLICE FORCES.—STRENGTH.

State or Territory.	Area of State in Sq. Miles.	1931.	1932.	1933.	1934.	1935.
New South Wales ..	309,432	3,653	3,590	3,600	3,660	3,593
Victoria ..	87,884	2,107	2,121	2,148	2,170	2,247
Queensland (a) ..	670,500	1,258	1,262	1,275	1,320	1,325
South Australia (a)	380,070	742	740	762	766	817
Western Australia (a)	975,920	573	550	559	583	592
Tasmania (a) ..	26,215	261	264	260	281	284
Northern Territory (a)	523,620	40	40	40	41	41
Fed. Cap. Territory	940	13	13	13	14	14
Total ..	2,974,581	8,647	8,580	8,657	8,775	8,913

(a) 30th June of year following.

The figures for New South Wales for 1935 are exclusive of 14 "black trackers," i.e., natives employed in detection of offenders chiefly in outlying districts, and 5 matrons, while the Victorian returns are exclusive of 3 matrons and 2 black trackers. For Queensland the figures exclude 40 native trackers, for South Australia 2 black trackers and 3 wardresses, and for the Northern Territory 34 black trackers. There are also 38 black trackers and 2 female searchers in Western Australia not included in the table. According to the returns, women police are employed in all the States, the respective numbers included in the above table being :—New South Wales 8, Victoria 7, Queensland 2, South Australia 14, Western Australia 7, and Tasmania 1. Their work is mainly preventive, and the importance and usefulness of their duties have been referred to in very high terms by the Chief Officers of Police. In his Report for the year 1932 the Inspector-General of Police in New South Wales states that "there can be no doubt that many girls have been saved from moral and physical danger through the activities of the women special constables." The Inspector-General also refers to the valuable assistance rendered by the women police to detectives and the ordinary police in connexion with crimes against women and children.

(ii) *Proportion to Population*.—The average number of inhabitants in the various States to each police officer during the same period is shown in the following table. In considering these figures allowance must, of course, be made for the unequal area and unequal distribution of the population of the various States.

POLICE FORCES.—COMPARISON WITH POPULATION.

State or Territory.	Number of Persons per Sq. Mile, 1933 Census.	Inhabitants to each Police Officer.				
		1931.	1932.	1933.	1934.	1935.
New South Wales	8.41	703	722	726	732	740
Victoria	20.71	854	853	849	847	817
Queensland (a)	1.41	745	752	753	733	740
South Australia (a)	1.53	776	781	762	763	718
Western Australia (a)	0.45	755	791	785	764	756
Tasmania (a)	8.68	861	860	875	814	808
Northern Territory (a)	0.01	121	120	120	125	130
Fed. Cap. Territory	9.52	677	687	712	707	666
Total	2.23	758	770	769	764	758

(a) 30th June of year following.

3. *Duties of the Police*.—In addition to the ordinary employment attaching to their office, the police are called upon to perform many duties which in other countries are carried out by various functionaries. Thus, in New South Wales, according to the Report of the Inspector-General, the time of one-fifth of the force was taken up during 1921 in extraneous duties unconnected with the protection of life and property, while the cash value of the services rendered to other Government departments was stated as over £200,000 per annum. The Queensland Commissioner refers to the circumstance that in 1935-36 no less than 54 important subsidiary offices were held by the police. In South Australia, the Commissioner alludes to the large number of subsidiary duties performed by police officers, and mentions that for the year ended June, 1936, 252,802 inquiries were made on behalf of other departments. While these special tasks doubtless involve some degree of sacrifice of ordinary routine duties, the fact that the general intelligence of the police is adequate for their performance, besides being most creditable, results in a large saving of the public money.

4. *Cost of Police Forces*.—The expenditure from Consolidated Revenue on the police forces in each State, and the cost per head of population during the five years 1931-32 to 1935-36, are given in the following table. In order to present comparable figures the cost of pensions or superannuation benefits is not included in the table:—

POLICE FORCES.—COST.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
TOTAL.					
	£	£	£	£	£
New South Wales	1,430,033	1,409,162	1,421,749	1,428,125	1,532,508
Victoria	588,489	604,343	620,570	665,750	714,097
Queensland	457,330	456,240	480,432	518,768	523,871
South Australia	294,244	278,209	279,481	263,052	270,897
Western Australia	207,653	203,298	218,523	221,628	230,033
Tasmania	80,505	83,798	85,161	99,393	106,801
Total	3,058,254	3,035,050	3,105,916	3,196,716	3,378,207

POLICE FORCES.—COST—*continued.*

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
PER HEAD OF POPULATION.					
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
New South Wales ..	11 2	10 11	10 11	10 10	11 6
Victoria ..	6 6	6 8	6 10	7 3	7 9
Queensland ..	9 10	9 8	10 1	10 10	10 9
South Australia ..	10 2	9 7	9 7	9 0	9 3
Western Australia ..	9 7	9 4	9 11	10 0	10 3
Tasmania ..	7 2	7 4	7 5	8 8	9 3
Total ..	9 4	9 3	9 4	9 7	10 0

The totals quoted above refer exclusively to the State police forces, and are based on returns supplied by the States for the respective financial years. As shown in the first table in this chapter, the Commonwealth Government maintains small police forces in the Northern Territory and in the Federal Capital Territory, the expenditure on which in 1935-36 amounted to £21,145 and £5,661 respectively.

5. *Interstate Police Conferences.*—In February, 1921, a Conference of the chief officers of the police forces of the various States was held in Melbourne. In addition to the discussion of matters of common interest, arrangements were made for the interchange of detectives. The results were so satisfactory that it was decided to hold similar Conferences annually. Amongst other matters discussed at the Hobart Conference in 1927, particular attention was given to the subject of traffic regulation in view of the large and increasing number of motor vehicles. Conferences were held at Melbourne in 1928, and at Perth in 1929, but owing to the need for economy no further meetings have been held.

§ 2. Lower (Magistrates') Courts.

1. *General.*—In considering the criminal returns of the various States, due allowance must be made for certain factors, such as the relative powers of the courts, both lower and higher, etc. In the case of lower courts, the actual number of laws in each State the breach of which renders a person liable to fine or imprisonment must be taken into account. Again, the attitude of the magistracy and police towards certain classes of offences is a factor, for in the case of liquor laws, or laws connected with vagrancy or gaming, the views of the magistrates, and instructions issued to the police, may be responsible for considerable variations in the returns. The strength and distribution of the police forces, and the age-constitution and distribution of the States' population, also influence the results. Due weight should also be given to the prevalence of undetected crime, but information on this point is not available for all States. It may be mentioned that each State has its own separate judicial system, the Commonwealth jurisdiction being confined to the High Court of Australia, which is largely a Court of Appeal intermediate to the Privy Council although it has also original jurisdiction, the Commonwealth Court of Conciliation and Arbitration and the Federal Court of Bankruptcy. Full particulars regarding the judicial power of the Commonwealth will be found in Chapter III. of the Commonwealth Constitution.

2. *Powers of the Magistrates.*—Preceding issues of the Official Year Book contained a brief statement of the powers of the magistrates in the various States (*see* No. 22, page 462), but this information is not repeated in the present volume.

3. **Persons Charged at Magistrates' Courts.**—The total number of persons who were charged before magistrates in each State is given below for the five years 1931 to 1935:—

MAGISTRATES' COURTS.—PERSONS CHARGED.

State or Territory.	1931.	1932.	1933.	1934.	1935.
New South Wales ..	121,743	116,341	126,134	127,960	134,900
Victoria ..	54,775	56,797	58,406	57,070	65,973
Queensland (a) ..	25,899	24,983	28,259	28,922	31,909
South Australia ..	17,033	17,546	15,285	15,916	17,299
Western Australia ..	14,986	14,707	13,544	14,575	19,255
Tasmania ..	6,785	7,051	7,271	7,197	8,345
Northern Territory ..	442 ^a	308 ^a	353 ^a	401	361
Federal Capital Territory ..	92	194	166	210	135
Total ..	241,755	237,927	249,418	252,251	278,117

(a) Year ended 30th June following.

Investigation of the returns shows that considerable variations in the figures for single States are occasioned by breaches of new Acts, or the more stringent enforcement of the provisions of existing Acts. Any deductions drawn from the total returns as to the increase or otherwise of criminality must, therefore, be largely influenced by a careful analysis of the detailed list of offences. Thus, the considerable increase in the total offences for the year 1935 as compared with the previous year, although caused partly by an increase of about 3,800 in the number of offences against property, was chiefly due to a rise in the offences against good order and in the miscellaneous class, amounting in the case of the former to nearly 10,000, and in the latter to 15,600, the bulk of the increase in the latter consisting of charges under the Traffic Act.

4. **Convictions and Committals.**—The figures given in the tabulation above include, of course, a number of people who were wrongly charged, and statistically are not of general importance. The actual number of convictions in connexion with the persons who appeared before the lower courts in each year of the period 1931 to 1935 is, therefore, given in the next table. A separate line is added showing the committals to higher courts.

MAGISTRATES' COURTS.—CONVICTIONS AND COMMITTALS.

State or Territory.		1931.	1932.	1933.	1934.	1935.
New South Wales ..	{ Convictions	101,675	93,860	100,075	104,018	110,135
	{ Committals	2,751	2,244	2,202	1,732	1,748
Victoria ..	{ Convictions	42,997	45,664	47,079	45,748	54,666
	{ Committals	1,095	1,024	1,404	1,531	1,587
Queensland (a) ..	{ Convictions	22,081	21,679	25,430	25,997	29,527
	{ Committals	367	352	367	256	209
South Australia ..	{ Convictions	14,654	14,705	13,060	13,728	14,838
	{ Committals	424	400	343	325	269
Western Australia ..	{ Convictions	13,441	13,214	12,244	13,585	17,966
	{ Committals	99	111	70	144	101
Tasmania ..	{ Convictions	6,180	6,450	6,849	6,404	7,938
	{ Committals	175	142	89	62	54
Northern Territory	{ Convictions	314 ^a	297 ^a	296 ^a	365	378
	{ Committals	11 ^a	..	17 ^a	9	8
Federal Capital Territory	{ Convictions	84	186	151	187	128
	{ Committals	1	5	2	..	1
Total ..	{ Convictions	201,426	196,055	205,184	210,092	235,243
	{ Committals	4,923	4,278	4,494	4,159	4,003

(a) Year ended 30th June following.

5. *Convictions for Serious Crime.*—While the figures given in the preceding table refer to the entire body of convictions, the fact must not be overlooked that they include a large proportion of offences of a technical nature, many of them unwittingly committed against various Acts of Parliament. Cases of drunkenness and minor breaches of good order, which, if they can be said to come within the category of crime at all, at least do so in a very different sense from some other offences, also help to swell the list. The following table has therefore been prepared for the purpose of showing the convictions at magistrates' courts for what may be regarded as the more serious offences, i.e., against the person and property, either separately or conjointly, and forgery and offences against the currency :—

MAGISTRATES' COURTS.—CONVICTIONS FOR SERIOUS CRIME.

State or Territory.	1931.	1932.	1933.	1934.	1935.
NUMBER.					
New South Wales ..	13,627	12,224	11,104	11,920	12,069
Victoria ..	4,123	4,024	4,715	4,438	4,955
Queensland (a) ..	2,396	2,526	2,254	2,329	2,311
South Australia ..	1,370	1,448	1,343	1,434	1,382
Western Australia ..	1,713	1,479	1,316	1,404	1,691
Tasmania ..	875	726	713	856	936
Northern Territory ..	97(a)	21(a)	20(a)	26	36
Federal Capital Territory ..	28	29	38	13	11
Total ..	24,229	22,477	21,503	22,420	23,391

PER 10,000 OF THE POPULATION.

New South Wales ..	53.31	47.38	42.67	45.43	45.62
Victoria ..	22.91	22.25	25.90	24.24	26.94
Queensland (a) ..	25.90	26.99	23.71	24.24	23.77
South Australia ..	23.80	25.05	23.11	24.58	23.62
Western Australia ..	39.61	33.99	29.99	31.79	37.97
Tasmania ..	38.92	31.97	31.21	37.35	40.77
Northern Territory ..	195.21(a)	42.61(a)	40.87(a)	52.71	70.57
Federal Capital Territory ..	31.81	32.49	41.96	14.04	11.72
Total ..	37.12	34.17	32.43	33.57	34.78

(a) Year ended 30th June following.

6. *Decrease in Serious Crime, 1881 to 1935.*—(i) *Rate of Convictions.* Statistics of convictions reveal a consistent increase in the rate of serious crime from 1925 to 1931, when 37.1 convictions per 10,000 of the population were recorded. Following this comparatively high figure the rate declined to 32.43 in 1933 and has since risen to 34.78. Viewed over a longer period the position is very satisfactory, for the average number of convictions is now less than half of those reported in 1881. Only the more serious offences particularized in the preceding sub-section have been taken into consideration.

MAGISTRATES' COURTS.—SERIOUS CRIME.—RATE OF CONVICTIONS, 1881 TO 1935.

Year.							Convictions per 10,000 Persons.
1881 .. .. .	..	..	..	..	..	..	69.3
1891 .. .. .	..	..	..	..	..	..	44.8
1901 .. .. .	..	..	..	..	..	..	29.1
1911 .. .. .	..	..	..	..	..	..	24.6
1921 .. .. .	..	..	..	..	..	..	29.2
1931 .. .. .	..	..	..	..	..	..	37.1
1935 .. .. .	..	..	..	..	..	..	34.8

(ii) *Causes of Decrease.* The decrease in crime already referred to is restricted entirely to the lower or magistrates' courts. There has also been a gratifying decrease in regard to offences tried at the higher courts, as will be seen later. A review of the various factors responsible for this decline is given in preceding issues of the Official Year Book. (See No. 22, p. 465.)

7. *Drunkenness.*—The number of cases of drunkenness and the convictions recorded in connexion therewith during the period 1931 to 1935 will be found in the following table:—

DRUNKENNESS.—CASES AND CONVICTIONS.

State or Territory.	1931.		1932.		1933.		1934.		1935.	
	Cases.	Con- victions.	Cases.	Con- victions.	Cases.	Con- victions.	Cases.	Con- victions.	Cases.	Con- victions.
New South Wales	21,195	20,559	21,815	21,510	25,727	25,421	26,372	26,344	28,450	27,823
Victoria	7,018	3,602	8,255	7,028	9,240	7,975	8,666	7,244	10,221	9,217
Queensland (a) ..	6,120	6,070	6,355	6,315	6,697	6,662	7,583	7,531	8,383	8,362
South Australia ..	2,334	2,320	2,653	2,643	2,373	2,357	2,430	2,418	2,748	2,737
Western Australia	2,329	2,309	2,111	2,093	1,992	1,960	2,016	1,999	2,686	2,671
Tasmania	245	243	250	245	228	222	312	309	419	411
Northern Terri- tory	146a	145a	139a	139a	133a	133a	159	154	146	146
Fed. Cap. Terr. ..	26	26	64	64	69	69	95	95	55	55
Total	39,413	37,283	41,642	40,037	46,459	44,799	48,133	46,094	53,108	51,422

(a) Year ended 30th June following.

Under the heading "drunkenness" are included cases of ordinary drunkenness, drunkenness and disorderliness, and habitual drunkenness. In the figures quoted for Western Australia, convictions for disorderliness attributable to drink were formerly included in the second category, but since 1929 the returns relate only to drunkenness either as a single or concurrent offence.

The number of convictions is, as might naturally be expected, almost identical with the number of cases. Victoria, however, is an exception, but in this State it is explained that offenders are generally discharged on a first appearance, and no conviction is recorded, a similar procedure being also adopted in the case of those arrested on Saturday and detained in custody till Monday. The logic of excluding these cases from the list of convictions is open to doubt.

(ii) *Convictions per 10,000 of Population.* The convictions for drunkenness per 10,000 of the population during each of the years from 1931 to 1935 are given hereunder :—

DRUNKENNESS.—CONVICTIONS PER 10,000 INHABITANTS.

State or Territory.	1931.	1932.	1933.	1934.	1935
New South Wales	80.4	83.4	97.7	100.4	105.2
Victoria	31.1	38.9	43.8	39.6	50.1
Queensland (a)	65.7	67.5	70.1	78.4	86.0
South Australia	40.3	45.7	40.6	41.5	46.8
Western Australia	53.4	48.1	44.7	45.3	60.0
Tasmania	10.8	10.8	9.7	13.5	17.9
Federal Capital Territory	29.5	71.7	76.2	102.6	58.6
Total	57.1	60.9	67.6	68.9	76.3

(a) Year ended 30th June following.

It would appear that the improvement in the social condition of the people during the past four years has arrested the decline in the rate of convictions and the falling off in the consumption of intoxicating liquors, which had been in evidence since 1927.

The convictions for drunkenness taken by themselves are not an altogether satisfactory test of the relative sobriety of the inhabitants of each State, inasmuch as several important factors must be taken into consideration. The age and sex constitution of the people, for example, are by no means identical in all the States. (Owing to the smallness of the population the figures for the Northern Territory are, of course, abnormal and have not, therefore, been included in the above table.) The avocations of the people affect the result, since persons engaged in strenuous callings are, on the whole, more likely to indulge in alcoholic stimulants than those employed in less arduous ones. The distribution of the population is also a factor, the likelihood of arrest or summons for drunkenness obviously being greater in the more densely populated regions, while allowance must be made for the attitude of the magistracy, the police and the public generally in regard to the offence. Due account also must be taken of the effect of legislation dealing with the limitation of hours during which liquor may be sold in hotels.

(iii) *Consumption of Intoxicants.* The following table shows the consumption of spirits, wine and beer per head of the population in Australia during each year of the quinquennium 1931-32 to 1935-36 :—

INTOXICANTS, CONSUMPTION.—AUSTRALIA.

Year.				Consumption per Head of Population.		
				Spirits.	Wine.	Beer.
				Imp. Galls.	Imp. Galls.	Imp. Galls.
1931-32 .. ..	..	..	..	0.17	0.82	7.32
1932-33 .. ..	..	..	..	0.17		7.43
1933-34 .. ..	..	..	..	0.19		8.02
1934-35 .. ..	..	..	..	0.21		8.68
1935-36 .. ..	..	..	..	0.21		9.60

The increase in the consumption per head of intoxicants during the past four years was accompanied by a corresponding rise in the figures for drunkenness over the same period.

(iv) *Treatment of Drunkenness.* (a) *General.* Though the problem of the correct method of dealing with dipsomania is by no means an easy one, it seems fairly clear that the present plan of bringing offenders before magistrates, and subjecting them to the penalty of imprisonment or fine, has little deterrent effect, as the same offenders are constantly reappearing before the courts. Further, the casting of an inebriate into prison and placing him in his weakened state in the company of professional malefactors certainly lowers his self-respect, and doubtless tends to swell the ranks of criminals. Examination of the prison records in New South Wales some years ago disclosed the fact that over 40 per cent. of the gaol population had commenced their criminal career with a charge of drunkenness. During the last few years the dangers of moral contamination in this way have been more accurately appreciated, and a system of classification of prisoners has been adopted whereby the petty offender is as far as possible kept from association with the more evilly-disposed.

(b) *Remedial.* Legislation has been passed in each State providing for the commitment of inebriates to special Government institutions. The laws in the various States are as follows :—New South Wales, Inebriates Act 1912; Victoria, Inebriates Act 1928; Queensland, Inebriate Institutions Act 1896; South Australia, Inebriates Act 1908 amended in 1920, Convicted Inebriates Act 1913; Western Australia, Inebriates Act 1912 amended in 1919; Tasmania, Inebriates Act 1885, Inebriate Hospitals Act 1892. Curative work was first undertaken by the Government of New South Wales in 1907. In most cases the institutes are connected with the gaols, and, naturally, custodial measures are still a strong feature in their management; nevertheless, the results of remedial measures have been encouraging.

8. *First Offenders.*—In all the States statutes dealing with first offenders have been in force for many years. Existing legislation is as follows :—New South Wales, Crimes Act 1900 amended in 1924 and 1929, First Offenders (Women) Act 1918; Victoria, Criminal Code Act 1928; Queensland, Criminal Code Act 1899; South Australia, Offenders Probation Act 1913; Western Australia, Criminal Code Act 1913; Tasmania, Probation of Offenders Act 1934. The method of procedure is practically the same in all cases, i.e., with regard to most first offenders the magistrate or judge is empowered to allow the offender to go free on recognizances being entered into for his good behaviour for a certain period. In practice, this humane law has been found to work excellently, very few of those to whom its provisions have been extended having been found to relapse into crime.

9. *Children's Courts.*—Special courts for the trial of juvenile offenders have been established in New South Wales, Victoria, Queensland, Western Australia, Tasmania and New Zealand, while Children's Courts, although not under that title, are provided for by the Maintenance Act of 1926 in South Australia. The object of these courts is to avoid, as far as possible, the unpleasant surroundings of the ordinary police court.

10. *Committals to Superior Courts.*—(i) *General.* In a previous paragraph it has been pointed out that comparisons of criminality based on a consideration of the total returns from magistrates' courts are somewhat inadequate, seeing that the figures include numbers of cases which are merely technical breaches of laws having in some instances a purely local significance. The committals to higher courts give a better basis of

comparison, although even in this connexion allowance must be made for the want of uniformity in jurisdiction. The table below gives the number of committals in each year from 1931 to 1935, with the rate of such committals per 10,000 of the population :—

COMMITTALS TO SUPERIOR COURTS.

State or Territory.	1931.	1932.	1933.	1934.	1935.
NUMBER.					
New South Wales	2,751	2,244	2,202	1,732	1,748
Victoria	1,095	1,024	1,404	1,531	1,587
Queensland (a)	367	352	367	256	209
South Australia	424	400	343	325	269
Western Australia	99	111	70	144	102
Tasmania	175	142	89	62	79
Northern Territory	114	..	174	9	8
Federal Capital Territory ..	1	5	2	..	1
Total	4,923	4,278	4,494	4,059	4,003

PER 10,000 OF THE POPULATION.

New South Wales	10.8	8.8	8.5	6.6	6.6
Victoria	6.1	5.7	7.7	8.4	8.6
Queensland (a)	4.0	3.8	3.9	2.7	2.1
South Australia	7.4	6.9	5.9	5.6	4.6
Western Australia	2.3	2.6	1.6	3.3	2.3
Tasmania	7.8	6.3	3.9	2.7	3.4
Northern Territory (a) ..	22.1	..	34.7	18.2	15.7
Federal Capital Territory ..	1.1	5.6	2.2	..	1.1
Total	7.5	6.5	6.8	6.1	6.0

(a) Year ended 30th June following.

(ii) *Decrease in Rate since 1861.* With occasional variations the rate of committals for serious crime has remained fairly stable during recent years, but if the comparison be carried back to 1861, it will be found that there has been a very considerable improvement, the decline in proportion to population since that date amounting to approximately 72 per cent.

RATE OF COMMITTALS, AUSTRALIA, 1861 TO 1935.

Year	1861.	1871.	1881.	1891.	1901.	1911.	1921.	1931.	1935.
Committals per 10,000 in-									
habitants	22	14	12	11	8	6	7	8	6

§ 3. Superior Courts.

1. Convictions at Superior Courts.—The number of convictions at superior courts and the rate per 10,000 of the population are given below for each of the years 1931 to 1935 :—

SUPERIOR COURTS.—CONVICTIONS.

State or Territory.	1931.	1932.	1933.	1934.	1935.
NUMBER.					
New South Wales (a) ..	1,139	1,024	855	862	766
Victoria	723	674	594	550	569
Queensland (a) ..	209	198	206	129	222
South Australia ..	274	236	224	206	172
Western Australia ..	72	75	38	81	55
Tasmania	84	81	59	55	54
Northern Territory ..	6	..	4	4	8
Federal Capital Territory ..	1	5	1	..	..
Total	2,508	2,293	1,981	1,887	1,846

PER 10,000 OF THE POPULATION.

New South Wales (a) ..	4.5	4.0	3.3	3.3	2.0
Victoria	4.0	3.7	3.3	3.0	3.1
Queensland (a) ..	2.3	2.1	2.2	1.3	2.3
South Australia ..	4.8	4.1	3.9	3.5	2.9
Western Australia ..	1.7	1.7	0.9	1.8	1.2
Tasmania	3.7	3.6	2.6	2.4	2.4
Northern Territory ..	12.1	..	8.2	8.1	15.7
Federal Capital Territory ..	1.1	5.6	1.1	..	..
Total	3.8	3.5	3.0	2.8	2.7

(a) Year ended 30th June following.

The rate of convictions has improved during each of the past four years, and the figure for 1935 approximately equals the average obtaining for some years prior to the rather heavy increase recorded for the period 1920 to 1931. Owing to the smallness of the population and the particular conditions prevailing there the rates for the Territories naturally show considerable variation.

2. Offences for which Convictions were recorded at Superior Courts. —In the following table will be found a classification of the principal offences for which persons were convicted at the higher courts during each year of the period 1931 to 1935. Owing to lack of uniformity in the presentation of the returns the information is confined to the chief offences against the person only.

SUPERIOR COURTS.—CONVICTIONS, OFFENCES AGAINST THE PERSON,
AUSTRALIA.

Offences.	1931.	1932.	1933.	1934.	1935.
Murder, and attempts at	38	15	21	17	29
Manslaughter	13	17	15	15	15
Rape, and attempts at	9	14	16	6	10
Other offences against females ..	118	102	130	134	144
" " " the person	211	217	216	191	186
Total	389	365	398	363	384

The total convictions for similar offences in 1901 amounted to 432. Stated according to the proportion per 10,000 of mean population, the rate in 1935 amounted to 0.57, as compared with a rate of 1.14 in 1901, the decrease for the period amounting, therefore, to 50 per cent.

3. **Habitual Offenders.**—Some account of the methods adopted in each State in connexion with habitual offenders is given in preceding Year Books (*see* No. 22, pp. 469-70).

4. **Capital Punishment.**—The table below gives the number of executions in each State during the period 1931 to 1935:—

EXECUTIONS.

State.	1931.	1932.	1933.	1934.	1935.
New South Wales (a) .. ..	..	1	..	..	2
Victoria .. ..	..	1	..	..	..
South Australia .. ..	..	..	..	..	..
Western Australia (a)	1	..	..	..	..
Tasmania .. ..	..	..	..	..	..
Total	1	2	..	..	2

(a) Year ended 30th June following.

Under the Criminal Code Amendment Act of 1922 capital punishment was abolished in Queensland.

In the early days of the history of Australia the penalty of death was attached to a large number of offences, many of which at the present time would be dealt with in the lower or magistrates' courts. With the growth of settlement, and the general amelioration in social and moral conditions, the list was, however, considerably curtailed, and the existing tendency is practically to restrict death sentences to cases of murder. It may be remarked that in cases of rape, which is a capital offence in some of the Australian States, the penalty has been but sparingly inflicted during the last few years. Juries are reputed to be loth to convict on this charge, owing to the uncertainty whether sentence of death will be pronounced.

The average annual number of executions in Australia from 1861 to 1880 was 9; from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; while the average for the last ten years has fallen to one.

§ 4. Prisons.

1. Prison Accommodation and Prisoners, 1935.—The table below shows the number of prisons in each State, the accommodation therein, and the number of prisoners in confinement at the end of 1935 :—

PRISON ACCOMMODATION AND PRISONERS, 1935.

State or Territory.	Number of Prisons.	Accommodation in—		Prisoners at End of Year.
		Separate Cells.	Wards.	
New South Wales (a)	23	(b) 2,334	..	1,330
Victoria ..	12	1,316	446	1,159
Queensland ..	6	541	110	301
South Australia ..	15	765	179	260
Western Australia ..	19	607	506	264
Tasmania ..	1	142	4	104
Northern Territory (a)	3	..	75	25
Total ..	79	5,705	1,320	3,443

(a) Year ended 30th June following.

(b) Total accommodation.

The figures refer to prisoners under sentence and are exclusive of aborigines. There are no gaols in the Federal Capital Territory, but there is a lock-up attached to the police station, where offenders are held while awaiting trial, and sentences not exceeding one week imposed by a magistrate may be served.

2. Prisoners in Gaol, 1931 to 1935.—The number of prisoners in gaol at the 31st December in each of the years 1931 to 1935 and the proportion per 10,000 of the population are given in the following table. The figures refer to prisoners under sentence, and are exclusive of aborigines.

PRISONERS IN GAOL.

State or Territory.	1931.	1932.	1933.	1934.	1935.
NUMBER.					
New South Wales (a)	1,648	1,775	1,515	1,398	1,330
Victoria ..	1,407	1,339	1,347	1,225	1,159
Queensland ..	318	353	331	339	301
South Australia ..	369	313	296	294	260
Western Australia ..	319	337	229	249	264
Tasmania ..	125	125	104	100	104
Northern Territory (a)	25	21	20	28	25
Total ..	4,211	4,263	3,842	3,633	3,443

(a) 30th June of year following.

PRISONERS IN GAOL—*continued.*

State.	1931.	1932.	1933.	1934.	1935.
PER 10,000 OF THE POPULATION.					
New South Wales (a)	6.4	6.9	5.8	5.3	5.0
Victoria ..	7.8	7.4	7.4	6.7	6.3
Queensland ..	3.4	3.8	3.5	3.5	3.1
South Australia ..	6.4	5.4	5.1	5.0	4.4
Western Australia ..	7.4	7.7	5.2	5.6	5.9
Tasmania ..	5.6	5.5	4.6	4.3	4.5
Total ..	6.5	6.5	5.8	5.4	5.1

(a) 30th June of year following.

After remaining stationary at 6.5 per 10,000 for the four years ended 1932 the proportion of prisoners in gaol to the total population declined to 5.1 in 1935, which figure contrasts most favourably with that obtaining in 1891 when the proportion was as high as 16 per 10,000. Rates for the Northern Territory have not been included on account of the abnormal conditions prevailing there.

3. Improvement in Prison Methods.—In previous issues of the Official Year Book a more or less detailed account was given of the improvements effected in each State during recent years in regard to methods of prison management (see Official Year Book No. 22, pp. 471-4), but this information is not repeated in the present volume.

§ 5. Civil Courts.

1. Lower Courts.—The total number of plaints entered together with the amounts awarded to plaintiffs during 1935 are given in the table hereunder. Particulars for earlier years will be found in preceding issues of the Official Year Book.

LOWER COURTS.—CIVIL CASES, 1935.

State.	1935.	State or Territory.	1935.
New South Wales { Cases No.	59,377	Western Australia { Cases No.	24,818
Amount £	346,268	Amount £	146,780
Victoria .. { Cases No.	88,818	Tasmania .. { Cases No.	10,500
Amount £	560,039	Amount £	55,078
Queensland (a) .. { Cases No.	20,053	Federal Capital { Cases No.	827
Amount £	193,128	Territory .. { Amount £	5,411
South Australia .. { Cases No.	23,398		
Amount £	158,250	Total .. { Cases No.	233,801
		Amount £	1,404,972

(a) Year ended 30th June, 1936.

Particulars in regard to the amount of judgments involved in the 332 civil cases held at Darwin and 257 held at Alice Springs during the year ended 30th June, 1936, are not available.

The figures just given represent the returns from the Small Debts Courts in New South Wales, the Petty Sessions Courts in Victoria, the Petty Debts Courts in Queensland, the Local Courts of South Australia and Western Australia, the Courts of Requests in Tasmania, and the Court of Petty Sessions in the Federal Capital Territory.

2. **Superior Courts.**—In the next table will be found the transactions on the civil side in the Superior Courts during the year 1935. The particulars given below include the number and amount of judgments entered by default or consent, and differ from those in previous issues prior to No. 29 which related in most States only to cases actually tried during the year.

The New South Wales returns refer to judgments in the District Courts only, and are exclusive of 2,162 judgments signed in the Supreme Court, for which the amount is not available.

SUPERIOR COURTS.—CIVIL CASES, 1935.

State.	1935.	State or Territory.	1935.
New South Wales	{ Causes No. 7,034 Amount £ 310,446	Western Australia	{ Causes No. 196 Amount £ 72,427
Victoria	{ Causes No. 2,739 Amount £ 223,194	(b) Tasmania	{ Causes No. 309 Amount £ 35,394
Queensland (a)	{ Causes No. 358 Amount £ 46,857	Federal Capital Territory	{ Causes No. 13 Amount £ 1,855
South Australia	{ Causes No. 321 Amount £ 44,539	Total	{ Causes No. 10,970 Amount £ 734,712

(a) Year ended 30th June, 1936.

(b) Judgments signed and entered.

3. **Divorces and Judicial Separations.**—The number of divorces and judicial separations in each State during the period 1931 to 1935 is shown below. The figures refer in the case of divorces to decrees made absolute in each year and include decrees for nullity of marriage.

DIVORCES AND JUDICIAL SEPARATIONS.

	1931.		1932.		1933.		1934.		1935.	
State.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
New South Wales	1,084	3	853	17	1,014	22	1,092	13	1,133	15
Victoria	423	2	459	..	490	..	621	..	602	6
Queensland (a)	107	1	90	..	100	5	153	1	152	..
South Australia	139	..	134	..	163	2	189	1	212	1
Western Australia	138	1	110	..	121	..	157	..	159	..
Tasmania	47	..	33	..	42	..	60	..	86	1
Northern Territory (a) ..	..	..	1	..	..	..	..	..	2	..
Federal Capital Territory ..	..	..	..	..	..	..	10	..	11	..
Total	1,938	7	1,680	17	1,948	29	2,282	15	2,357	23

(a) Year ended 30th June following.

The average annual number of divorces and judicial separations in Australia at decennial periods from 1871 to 1939 and the proportion per 10,000 existing marriages were as follows:—

DIVORCES AND JUDICIAL SEPARATIONS.—AUSTRALIA.

	1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1921-30.
Averages	29	70	358	401	707	1,699
Per 10,000 existing marriages	0.98	1.74	6.86	6.15	8.13	15.45

The rapid increase of divorce during the period 1891-1900 occurred largely in New South Wales and Victoria where legislation passed respectively in 1899 and 1889 made the separation of the marriage tie comparatively easy.

4. **Probates.**—Information in regard to probates and letters of administration will be found in Chapter XXVI.—Private Finance.

5. **Bankruptcies.**—Particulars relating to bankruptcy in each State up to the end of the year 1927 were incorporated under this heading in preceding issues of the Official Year Book. Under the terms of the Bankruptcy Act 1924-1933 jurisdiction in bankruptcy and insolvency was taken over by the Commonwealth from 1st August, 1928. The Act makes provision for the declaration of districts, and each State (except Queensland) has been declared a bankruptcy district. The bankruptcy district of New South Wales includes the Federal Capital Territory, while Queensland has been divided into three districts corresponding to the three Supreme Court districts in that State. The Northern Territory was also declared a separate bankruptcy district. Operations under the Act for the year ended 31st July, 1936, are given in the following table. For the purposes of comparison, figures for each of the preceding two years have been appended to the table.

COMMONWEALTH BANKRUPTCY ACT RETURNS, 1935-36.

Heading.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Australia
Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Number .. 261	195	138	174	29	44	..	841
	Liabilities £ 399,620	139,113	109,581	288,578	60,353	24,413	..	1,021,658
	Assets £ 181,281	31,206	53,438	107,729	18,806	4,358	..	396,818
Compositions, etc., after Bankruptcy	Number .. 8	..	..	1	..	..	..	9
	Liabilities £ 9,231	..	..	279	..	..	..	9,510
	Assets £ 5,157	..	..	590	..	..	..	5,747
Compositions, etc., without Bankruptcy	Number .. 5	5	..	403	46	2	..	461
	Liabilities £ 3,402	5,057	..	1,485,212	129,248	1,563	..	1,624,482
	Assets £ 1,218	5,329	..	1,110,124	139,795	886	..	1,257,352
Deeds of Arrangement	Number .. 173	143	58	4	15	9	..	402
	Liabilities £ 275,620	288,194	97,327	38,079	61,190	7,173	..	708,201
	Assets £ 226,976	201,299	91,392	45,167	45,682	5,692	..	616,208
Total, 1935-36	Number .. 447	343	196	582	90	55	..	1,711
	Liabilities £ 687,013	432,361	206,908	1,812,748	250,799	32,949	..	3,443,711
	Assets £ 414,032	237,834	144,830	1,263,610	204,283	10,936	..	2,276,125
Total, 1934-35	Number .. 450	394	164	581	89	49	..	1,727
	Liabilities £ 662,207	835,293	192,589	1,372,356	190,470	99,149	..	3,328,132
	Assets £ 438,579	328,596	142,158	849,132	199,220	53,783	..	2,011,463
Total, 1933-34	Number .. 646	444	212	614	147	71	..	2,134
	Liabilities £ 967,241	961,184	381,752	1,507,992	255,088	95,302	..	4,163,219
	Assets £ 727,469	480,553	312,017	1,019,915	204,855	51,166	..	2,795,975

The Commonwealth Attorney-General's Report for the year ended 31st July, 1929, states that comparative tables have not been prepared in relation to State bankruptcy or insolvency for previous years, as the methods of collection and presentation do not afford a reliable common basis. It is also pointed out that the procedure

in certain States has been largely influenced by the procedure in force prior to the passing of the Commonwealth Act, and that, therefore, no particular significance attaches to the large number of compositions, etc., in South Australia and Western Australia. The Bankruptcy Act 1930 created a Federal Court of Bankruptcy and gave power to appoint two Judges thereto. In 1930 a Federal Judge in Bankruptcy was appointed to deal with bankruptcy work, in addition to the State Judges, in New South Wales and Victoria, the Courts in these States having been unable to cope with the business. All the bankruptcy cases in these States are now heard by the Federal Judge who sits in Sydney and Melbourne alternately.

6. High Court of Australia.—Under the provisions of section 71 of the Commonwealth Constitution Act, the judicial power of the Commonwealth is vested in a Federal Supreme Court, called the High Court of Australia, and in such other courts as the Parliament creates or invests with federal jurisdiction. The Federal High Court possesses both original and appellate jurisdiction. The powers of the Court are defined in Chapter III. of the Constitution Act and in the Judiciary Act 1903-1933. At present the Court consists of a Chief Justice and five other judges. Sittings of the Court are held in the capitals of the various States as occasion may require. The High Court functions as a Court of Appeal for Australia. The following statement shows the transactions of the High Court for the years 1935 and 1936. Figures for previous years are given in preceding issues.

COMMONWEALTH HIGH COURT.—TRANSACTIONS, 1935 AND 1936.

Original Jurisdiction.	1935.	1936.	Appellate Jurisdiction.	1935.	1936.
Number of writs issued	40	35	Number of appeals set down for hearing ..	97	107
Number of causes entered for trial ..	12	16	Number allowed ..	45	40
Verdicts for plaintiffs ..	3	6	Number dismissed ..	56	55
Verdicts for defendants	3	6	Otherwise disposed of	9	10
Otherwise disposed of ..	4	4			
Amount of judgments	£7,711	£26,902			

During the years 1935 and 1936 respectively the Court dealt also with the following : Appeals from Assessments under the Income Tax Assessment Acts 1936, 49, 40; Special cases stated for the opinion of the Full Court, 12, 8; Applications for Prohibitions, etc., 9, 30. The fees collected in 1935 amounted to £1,084, and in 1936 to £594.

7. Commonwealth Court of Conciliation and Arbitration.—A more or less detailed statement regarding the operation of this Court, which was established under the provisions of the Commonwealth Conciliation and Arbitration Act of 1904-1934, will be found in the Chapter dealing with Labour, Wages, etc.

§ 6. Cost of Administration of Justice.

1. Expenditure by the States.—The table below shows the expenditure from Consolidated Revenue during the year 1935-36 in connexion with the administration of justice in each of the States. The figures shown represent the gross expenditure, which is offset to a large extent by the various items of revenue.

STATE EXPENDITURE ON JUSTICE, 1935-36.

State.	Expenditure.	Per Head of Population.	State.	Expenditure.	Per Head of Population.
	£	s. d.		£	s. d.
N.S.W. .. { Police	1,532,508	11 6	W.A. .. { Police	230,933	10 3
.. { Gaols	325,425	2 5	.. { Gaols	27,290	1 3
.. { Other	627,628	4 9	.. { Other	92,243	4 1
Vic. .. { Police	714,097	7 9	Tas. .. { Police	106,801	9 3
.. { Gaols	114,115	1 3	.. { Gaols	12,935	1 1
.. { Other	228,086	2 6	.. { Other	44,322	3 10
Q'land .. { Police	523,871	10 9			
.. { Gaols	31,583	0 8			
.. { Other	180,373	3 8			
S.A. .. { Police	270,897	9 3	Total .. { Police	3,378,207	10 0
.. { Gaols	35,421	1 2	.. { Gaols	546,769	1 8
.. { Other	99,767	3 5	.. { Other	1,272,419	3 9
			.. Total	5,197,395	15 5

2. Federal Expenditure.—The expenditure shown in the foregoing table is that incurred by the State Governments only, and does not include expenditure in connexion with the Commonwealth Attorney-General's Department, which is given hereunder for the period 1931-32 to 1935-36 :—

COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT—EXPENDITURE.

Year.	Amount.	Year.	Amount.
	£		£
1931-32	196,528	1934-35	223,258
1932-33	197,070	1935-36	239,702
1933-34	207,279		

The totals for each year include expenditure in connexion with patents and copyright which amounted in 1935-36 to £53,285. As pointed out previously, the Commonwealth took over jurisdiction in bankruptcy in August, 1928, and the expenditure thereon in 1935-36 amounted to £36,281, including the salary of the Federal Judge, £2,500. Expenditure in connexion with the Federal Capital Territory police amounted in 1935-36 to £5,661, while £1,569 was expended on miscellaneous items including the Law Court, Titles Office and Industrial Arbitration Board. Revenue in connexion with the Attorney-General's Department amounted for the year to £97,116, comprising £58,783 for patents, copyright, trademarks and designs, £29,517 for bankruptcy and £8,816 miscellaneous including fees and fines.

In addition to the foregoing the following amounts were expended in the Northern Territory by the Department of the Interior :—Police, £21,145; prisons, £5,723; other expenditure in connexion with administration of justice, £4,808.

CHAPTER VIII.

PUBLIC BENEVOLENCE.

§ 1. Introductory.

Charity and charitable effort in Australia may be classified under three headings: (a) State; (b) public; and (c) private. To the first belong all institutions wholly provided for by the State, such as the principal hospitals for the insane in the various States, the Government and leased hospitals in Western Australia, and the Government asylums for the infirm in New South Wales. The other classes comprise public institutions of two kinds, viz.:—(i) those partially subsidized by the State or State endowed, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the former division belong such institutions as the principal metropolitan hospitals. In the latter are included institutions established and endowed by individuals for the benefit of the needy generally. All charitable movements of a private character are included in the third group. A more or less accurate statistical account is possible in classes (a) and (b), but in regard to (c) complete tabulation is, for obvious reasons, impossible. Owing to differences in the method and date of collection and tabulation it is impossible to bring statistics of charitable institutions to a common year. In general, there is considerable want of harmony in the statistical information available for the different States.

No poor-rate is levied in Australia. Reference to old-age pensions, invalid pensions and maternity allowances, which are provided by the Commonwealth Government, will be found in the Chapter XXVII.—Public Finance.

From time to time relief funds have been organized for famine-stricken countries in various parts of the world, or for places where plagues, flood, fire, or earthquake have shown the need of urgent relief. Special funds were also raised for persons disabled or bereaved through war. Complete statistical information in regard to these forms of charity is not, however, available. It may be mentioned that the daily Press frequently accepts the duty of collectorship in charity appeals. In regard to subscriptions to the various patriotic funds which were instituted in consequence of the war, the total for Australia was estimated to exceed £12,500,000.

§ 2. The Larger Charities of Australia.

1. *Public Hospitals (other than Hospitals for the Insane).*—(i) *General.* All the State capitals have several large and well-equipped hospitals, and there is at least one in every important town. In large centres there are hospitals for infectious diseases, consumptives, women, children, incurables, etc.

The particulars given herein refer to public hospitals at the latest available date, and include all institutions affording hospital relief, whether general or special, with the exception of the hospitals for the insane and private hospitals conducted commercially. It is considered that the extension of the scope of these statistics to combine both general and special institutions will afford a better comparison as between the various States than the statistics previously issued relating to general hospitals only. The particulars for New South Wales in the following tables relate to hospitals operating under the Public Hospitals Act, 1929–1936.

(ii) *Principal Hospitals in each State.* In earlier issues of the Official Year Book (See No. 22, pp. 451–2) particulars respecting staff, accommodation, etc., of each of the principal hospitals were given.

(iii) *Number, Staff and Accommodation, 1935.* Details regarding the number of hospitals, staffs and accommodation for the year 1935, or nearest available year, are given in the appended table :—

PUBLIC HOSPITALS.—NUMBER, STAFFS AND ACCOMMODATION, 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Hospitals ..	172	70	117	54	94	19	526
Medical Staff—							
Honorary ..	1,459	825	201	214	130	74	2,903
Salaried ..	234	199	150	61	27	23	694
Total ..	1,693	1,024	351	(b) 275	(c) 157	97	3,597
Nursing Staff ..	3,597	2,382	2,220	828	(c) 886	376	10,289
Accommodation—							
Number of beds and cots	12,223	6,987	5,473	2,361	3,260	1,423	31,727

(a) The figures relate to the years ended as follows :—New South Wales, Queensland, Western Australia and Tasmania—30th June, 1936 ; South Australia—31st December, 1935 ; Victoria—30th June, 1935.

(b) Exclusive of particulars of Lying-in Homes, Sanatoria and Convalescent Homes.

(c) Exclusive of " Leased " Hospitals.

The figures for accommodation shown in the above table include, where available, a considerable number of beds and cots for certain classes of cases in out-door or verandah sleeping places.

(iv) *Patients Treated.* The table hereunder furnishes particulars respecting patients treated.

PUBLIC HOSPITALS.—PATIENTS TREATED, 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Indoor Relief—Inmates at beginning of year—							
Males ..	3,983	2,503	2,024	693	967	339	10,509
Females ..	4,239	2,731	1,721	733	733	377	10,534
Total ..	8,222	5,234	3,745	1,426	1,700	716	21,043
Admissions and Re-admissions during year—							
Males ..	90,914	36,576	47,480	14,584	19,509	8,792	217,855
Females ..	100,348	45,030	44,176	16,742	17,536	10,074	233,906
Total ..	191,262	81,606	91,656	31,326	37,045	18,866	451,761
Discharges—							
Males ..	85,878	33,807	44,058	13,532	18,379	8,306	204,860
Females ..	96,068	43,089	42,759	16,024	16,762	9,712	225,014
Total ..	182,546	76,896	87,717	29,556	35,141	18,018	429,874
Deaths—							
Males ..	4,767	2,765	2,317	1,038	1,198	436	12,551
Females ..	3,395	1,943	1,312	655	632	347	8,254
Total ..	8,132	4,708	3,659	1,693	1,830	783	20,805
Inmates at end of year—							
Males ..	4,252	2,507	2,199	707	899	389	10,953
Females ..	4,554	2,729	1,826	706	875	392	11,172
Total ..	8,806	5,236	4,025	1,503	1,774	781	22,125
Average Daily Number Resident—							
Males ..	(b)	(b)	(b)	753	(b)	339	(b)
Females ..	(b)	(b)	(b)	762	(b)	386	(b)
Total ..	8,621	5,155	3,892	(c) 1,515	1,749	725	21,657

(a) See footnote (a) to previous table.

(b) Not available.

(c) See footnote (b) to previous table.

(v) *Revenue and Expenditure.* The revenue and expenditure for the year 1935 were as follows:—

PUBLIC HOSPITALS.—REVENUE AND EXPENDITURE, 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (b)	Tas.	Total.
Revenue—	£	£	£	£	£	£	£
Government Aid ..	5,111,000	3,047,583	1,085,287	1,889,671	227,110	61,669	2,023,779
Municipal Aid ..	..	84,307	143,929	32,710	5,377	5,409	271,732
Public Subscriptions, Legacies, etc. ..	(d) 481,305	267,941	34,270	21,322	40,849	14,683	860,370
Fees ..	414,979	178,125	217,662	86,929	111,210	52,800	1,061,714
Other ..	60,677	210,337	133,378	9,492	28,727	3,864	446,475
Total ..	1,790,059	1,042,463	935,026	337,127	413,073	141,434	4,666,082
Expenditure—							
Salaries and Wages	710,093	392,110	369,051	148,325	171,165	74,449	1,896,093
Upkeep and Repair of Buildings and Grounds ..	74,031	15,522	28,613	18,113	15,309	7,304	158,895
All Other Ordinary	667,828	411,039	395,477	154,177	157,338	62,374	1,848,233
Capital (c) ..	291,315	194,945	127,406	32,344	59,647	..	705,657
Total ..	1,773,270	1,013,616	921,447	352,959	403,459	144,127	4,608,878

(a) See note (a) to table on page 234. (b) Excluding "Leased" Hospitals, except for amounts of Government and Municipal Aid. These were subsidized from the Hospital Trust Fund to the extent of £1,181 in 1935-36. (c) Includes such items as Purchases of Land, Cost of New Buildings and Additions to Buildings. (d) Includes systematic contributions, £233,640.

(vi) *Summary for Five Years, 1931 to 1935.* Returns for the last five years of the number of hospitals in Australia, beds, admissions, indoor patients treated, deaths and expenditure are given in the following table. The figures relate to both general and special hospitals. It should be noted that the statistics for the States cannot be brought to a common year, and consequently the following particulars relate to a combination of calendar and financial years.

PUBLIC HOSPITALS.—SUMMARY, AUSTRALIA.

Particulars.	1931.	1932.	1933.	1934.	1935.
Number of institutions ..	513	531	530	526	526
Number of beds ..	(b) 27,574	29,066	30,480	31,190	31,727
Admissions during year ..	353,266	378,777	405,190	422,896	451,761
Total indoor cases treated ..	371,315	397,795	424,877	443,061	472,804
Deaths ..	(a) 10,482	17,455	17,915	19,705	20,805
Expenditure ..	£ 3,524,414	3,518,087	3,809,570	4,222,174	4,608,878

(a) Exclusive of New South Wales.

(b) Excluding out-door beds in New South Wales.

In addition to those admitted to the institutions, there are large numbers of out-patients. So far as the returns show there were 50,308 out-patients treated in New South Wales, 234,070 in Victoria, 212,801 in Queensland, 58,006 in South Australia, and 132,214 in Tasmania.

2. *Benevolent and Destitute Asylums.*—(i) *General.* The public provision for the care of indigent old people has been a feature of the social development of recent years in most countries. Numerous establishments exist in Australia for the housing and protection of persons no longer able to provide for themselves. These institutions are supported by Government and municipal aid, public subscriptions, bequests, etc.; while in many cases relatives of poor and afflicted persons contribute to their maintenance.

An entirely satisfactory statistical tabulation in regard to all forms of charitable aid is especially difficult in the case of benevolent institutions, because the services provided by these institutions are not always identical. For example, in Western Australia, the Home for Destitute Women includes a maternity ward, for which statistics are not kept separately. Since the chief function of the institution is to help the destitute, it has been included amongst benevolent asylums. In Victoria, although several of the hospitals were formerly also benevolent asylums, a separation was effected and asylum patients were transferred to appropriate institutions.

(ii) *Principal Institutions.* Particulars respecting the accommodation and the numbers of inmates of the principal institutions were published in earlier issues of the Official Year Book (*See No. 22, p. 485*).

(iii) *Revenue and Expenditure.* Details regarding revenue and expenditure for the year 1935 are given in the following table:—

BENEVOLENT ASYLUMS.—REVENUE AND EXPENDITURE. 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Revenue—							
Government Aid ..	108,678	36,289	30,313	9,697	11,537	12,303	208,817
Municipal Aid ..	75	911	..	..	5	..	991
Public Subs., Legacies, etc. ..	3,319	14,120	2,455	..	666	105	20,665
Fees ..	9,740	39,161	33,998	5,920	15,432	5,439	109,690
Other ..	37,253	12,667	11,889	1,179	701	265	63,954
Total ..	159,065	103,148	78,655	16,796	28,341	18,112	404,117
Expenditure—							
Salaries and Wages ..	78,538	30,294	72,776	6,197	11,584	8,629	208,018
Upkeep and Repair of Buildings ..	6,450	5,688	2,704	673	3,115	861	19,491
All Other (b) ..	75,663	59,883	4,329	9,926	13,734	8,622	172,257
Total ..	160,651	95,865	79,809	16,796	28,433	18,112	399,666

(a) The figures relate to the years ended as follows:—New South Wales and South Australia—31st December, 1935; Victoria—30th June, 1935; and Queensland, Western Australia and Tasmania—30th June, 1936. (b) Including £5,318 in Victoria and £1,320 in Queensland, covering such items as Purchases of Land, Cost of New Buildings and Additions to Buildings.

3. *Orphanages, Industrial Schools, etc.—(i) General.* The methods of caring for orphans and neglected children differ extensively, inasmuch as some of the children are more or less segregated in orphanages and industrial schools, while others are boarded-out with their mothers or female relatives or with approved foster mothers. The children in orphanages and similar institutions may receive, in addition to primary education, some craft training. In all cases employment is found for the children on their discharge from the institution, and they remain for some time under the supervision of the proper authorities. The conditions under which orphans, neglected children and children boarded-out live, are subject to frequent inspections. Apart from the amounts shown in (iii) below the gross expenditure on orphanages, etc., in 1935 was approximately £390,000.

(ii) *Principal Institutions.* Particulars concerning the principal institutions in each State were published in earlier Year Books (*See No. 22, p. 486*).

(iii) *Transactions of State Departments.* The following table summarizes the transactions during 1935 of State Departments in connexion with children under their

control or supervision. In addition to neglected children, the figures include uncontrollable and convicted children who are wards of a Government authority, as well as poor children whose parents obtain assistance from the Government without giving up the legal right of custody.

CHILDREN UNDER GOVERNMENT AUTHORITY.—SUMMARY, 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>A. Children maintained or subsidized by the State.</i>							
In State shelters, industrial schools, reformatories, etc. (b)	799	472	856	240	41	210	2,618
In licensed or approved institutions .. ..	..	1,295	..	..	585	..	1,880
Boarded-out—							
With own mothers ..	10,030	7,330	5,562	d6,791 (c)	{ 2,516 305 }	{ d3,224 }	42,523
With licensed foster mothers, guardians, relatives and friends	3,764	2,409	592				
Total children maintained or subsidized by the State	14,593	11,506	7,010	7,031	3,447	3,434	47,021
<i>B. Children not maintained or subsidized by the State.</i>							
In licensed or approved institutions	910	..	..	..	22	..	932
Boarded-out	309	..	..	1,318	426	..	2,053
On probation (from Institutions or Children's Courts)	3,435	1,124	81	185	415	..	5,141
In service or apprenticed	315	384	417	234	112	..	1,462
Adopted or otherwise placed	213	..	17	24	..	..	254
Total children not maintained or subsidized by the State	5,383	1,508	515	1,760	975	..	10,141
Total children under State control or supervision..	19,976	13,014	7,525	8,791	4,422	3,434	57,162
Gross cost of children's relief	£ 439,773	£ 260,723	£ 200,122	£ 44,685	£ 27,183	£ 14,589	£ 887,075
Receipts from parent's contributions, etc. ..	19,742	8,582	9,230	3,997	12,402	791	54,744
Net cost to State ..	420,031	252,141	190,892	40,688	14,781	13,798	932,331

(a) The figures relate to the years ended as follows:—New South Wales, Victoria and Queensland—31st December, 1935; Other States—30th June, 1935. (b) Including inmates of hospitals. (c) Including 5,887 children in receipt of Ration Relief. (d) Mostly with own mothers. (e) In addition there were 261 children at Fairbridge Farm School.

The total expenditure on children's relief in the previous table shows considerable variation amongst the States owing to the different methods of treating assistance to mothers with dependent children. In South Australia, Western Australia and Tasmania, large amounts have been excluded from the total expenditure on this account owing to the difficulty of obtaining separate amounts for allowances made in respect of the dependent children only.

4. **Leper Hospitals.**—Isolation hospitals for the care and treatment of lepers have been established in New South Wales (Little Bay); Queensland (Peel Island, near Brisbane); Western Australia (Derby); and the Northern Territory (Channel Island, near Darwin). At the end of 1936 there were 16 cases in residence at Little Bay, 66 at Peel Island, 85 at Derby, and 117 at Channel Island. There were also 5 cases isolated in the south of Western Australia and 1 case in Victoria, which were European cases infected elsewhere.

During the year 1936, 18 cases of leprosy were notified in Australia of which 3 were in New South Wales, 7 in Queensland 7 in Western Australia and 1 in the Northern Territory. There were 3 deaths from leprosy registered during 1936 and 4 in 1935.

5. **Hospitals for the Insane.**—(i) *General.* The methods of compiling statistics of insanity are fairly uniform throughout the States, but comparisons are of doubtful validity, because of an element of uncertainty as to possible differences in diagnosis in the early stages of the disease.

(ii) *Hospitals, Staff, etc., 1935.* Particulars regarding the number of institutions, the medical and nursing staffs, and accommodation are given in the appended table for the year 1935 :—

HOSPITALS FOR THE INSANE.—NUMBER, STAFFS, ACCOMMODATION, 1935.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Institutions ..	13	(b) 12	3	2	4	1	35
Medical Staff—							
Males	33	26	6	6	4	3	78
Females	4	..	1	..	..	..	5
Total	37	26	7	6	4	3	83
Nursing Staff and Attendants—							
Males	1,047	728	205	120	128	70	2,388
Females	1,020	669	226	107	103	71	2,196
Total	2,067	1,397	521	227	231	141	4,584
Accommodation—							
Number of beds and cots	11,377	6,293	3,419	1,682	1,419	685	24,880

(a) The figures relate to years ended as follows :—New South Wales, Queensland and Tasmania—30th June, 1936; other States—31st December, 1935. (b) Includes 144 licensed private houses, in which cases at the end of the year numbered 80; other particulars are not available.

(iii) *Patients, 1935.* Information regarding patients treated, deaths, etc., for the year 1935 is given in the table hereunder :—

HOSPITALS FOR THE INSANE.—PATIENTS, DEATHS, ETC., 1935.(a)

Particulars.	N.S.W.	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of distinct persons treated during year (c)—							
Males	6,598	3,784	2,315	950	1,003	383	15,030
Females	5,783	4,143	1,612	832	566	360	13,290
Total	12,381	7,927	3,927	1,782	1,569	743	28,335

(a) See footnote (a) to previous table. (b) Including 19 males and 85 females in licensed private houses. (c) Exclusive of transfers to other Institutions.

HOSPITALS FOR THE INSANE.—PATIENTS, DEATHS, ETC., 1935 (a)—continued.

Particulars	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of patients on books at beginning of year—							
Males	5,727	3,359	1,957	820	878	328	13,069
Females	4,954	3,616	1,362	699	477	303	11,441
Total	10,681	7,005	3,319	1,519	1,355	631	24,510
Admissions and re-admissions exclusive of absconders retaken and transfers from other Institutions—							
Males	893	423	330	135	125	53	1,961
Females	844	497	238	133	89	57	1,858
Total	1,737	920	568	268	214	112	3,819
Discharges (including absconders not retaken)—							
Males	386	170	186	66	32	36	876
Females	364	223	134	71	21	26	839
Total	750	393	320	137	53	62	1,715
Deaths—							
Males	392	246	164	44	60	29	935
Females	267	227	82	35	15	16	642
Total	659	473	246	79	75	45	1,577
Number of patients on books at end of year—							
Males	5,842	3,360	1,937	846	911	318	13,220
Females	5,167	3,693	1,384	726	530	318	11,818
Total	11,009	7,059	3,321	1,572	1,441	636	25,038
Average daily number resident—							
Males	5,431	(b)2,844	1,959	820	870	322	12,255
Females	4,683	(b)3,154	1,348	713	483	312	10,693
Total	10,114	(b)5,998	3,307	1,512	1,353	634	22,948
Number of patients on books at end of year per 1,000 of population—							
Males	3.31	3.62	2.96	2.48	2.52	2.81	3.55
Females	3.92	3.97	2.96	2.48	2.52	2.81	3.55
Persons	3.61	3.80	2.96	2.48	2.52	2.81	3.55
Average number of patients resident in hospitals for insane per 1,000 of mean population—							
Males	4.04	3.12	3.85	2.83	3.68	2.76	3.59
Females	3.57	3.39	2.91	2.44	2.31	2.75	3.23
Persons	3.81	3.26	3.40	2.64	3.04	2.75	3.41

(a) See footnote (a) to previous table.

(b) Exclusive of four licensed private houses.

In some States persons well advanced towards recovery are allowed to leave the institutions and reside with their relatives or friends, but they are under supervision and their names are kept in the records.

(iv) *Revenue and Expenditure, 1935.* The revenue of Government asylums is small in comparison with their cost, and consists chiefly of patients' fees. The proportion of expenditure borne by the State amounts to about 86 per cent.

HOSPITALS (GOVERNMENT) FOR THE INSANE.—FINANCES, 1935.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Revenue (Exclusive of Government Grants)—	£	£	£	£	£	£	£
Fees of Patients	101,480	40,825	27,858	22,130	15,623	8,525	216,441
Other	6,659	4,098	1,187	4,874	2,084	88	18,990
Total	108,139	44,923	29,045	27,004	17,707	8,613	235,431
Expenditure—							
Salaries and Wages ..	423,892	266,071	140,264	49,556	57,881	31,099	968,793
Upkeep and Repair of Buildings and Grounds	11,274	41,743	..	3,597	1,607	1,724	59,945
All Other (b)	298,178	146,878	78,987	48,971	33,186	24,613	630,815
Total	733,344	454,692	219,251	102,124	92,676	57,436	1,659,523
Expenditure per Average Daily Resident ..	£72/10/2	£75/16/1	£66/6/0	£66/4/7	£68/9/11	£90/11/10	£72/6/4

(a) The figures relate to years ended as follows:—South Australia—31st December, 1935; other States—30th June, 1936. (b) Includes the following amounts for capital expenditure on Purchases of Land, Cost of New Buildings, and Additions to Buildings: New South Wales, £61,955; Queensland, £13,078; South Australia, £24,419; Western Australia, £900.

(v) *Summary for Australia, 1931 to 1935.* The table hereunder gives a summary of hospitals for the insane in Australia during each of the five years 1931 to 1935. The figures for the States cannot be brought to a common year; consequently the following particulars relate to a combination of calendar and financial years. Licensed houses are included in all particulars save revenue and expenditure for New South Wales and Victoria. The figures are exclusive of reception houses and observation wards in gaols. In New South Wales the expenditure includes cost of Broken Hill patients treated in South Australian hospitals:—

HOSPITALS FOR THE INSANE.—SUMMARY, AUSTRALIA.

Particulars.	1931.	1932.	1933.	1934.	1935.
Number of institutions	36	36	37	36	35
„ „ beds	22,540	23,440	24,427	24,217	24,880
Admissions	3,314	3,318	3,471	3,651	3,819
Discharged as recovered, relieved, etc.	1,497	1,523	1,566	1,598	1,715
Deaths	1,503	1,422	1,498	1,467	1,577
Expenditure—Total	£1,356,387	£1,355,515	£1,374,111	£1,527,021	£1,659,523
„ —Per Average Daily Resident ..	£63/2/6	£62/8/7	£62/14/5	£68/5/8	£72/6/4

(vi) *Number of Insane, 1931 to 1935.* The proportion of insane, as well as the total number returned as under treatment, shows a continuous increase during the period covered by the following table and may possibly be a reflection of the financial stress of the period.

INSANE PERSONS IN INSTITUTIONS.

State.	1931.	1932.	1933.	1934.	1935.
NUMBER.					
New South Wales	9,894	10,122	10,367	10,681	11,009
Victoria	6,704	6,742	6,812	6,927	7,059
Queensland	3,162	3,194	3,214	3,319	3,321
South Australia	1,395	1,410	1,465	1,519	1,572
Western Australia	1,275	1,320	1,331	1,355	1,441
Tasmania	646	661	667	631	636
Australia	23,076	23,449	23,856	24,432	25,038

PER 1,000 OF POPULATION.

New South Wales	3.84	3.89	3.95	4.04	4.13
Victoria	3.72	3.72	3.73	3.77	3.83
Queensland	3.37	3.37	3.35	3.43	3.39
South Australia	2.42	2.43	2.51	2.60	2.68
Western Australia	2.94	3.02	3.02	3.06	3.22
Tasmania	2.85	2.90	2.93	2.76	2.77
Australia	3.52	3.55	3.58	3.64	3.71

The difference between States in the number of insane persons in institutions per 1,000 of population may be due to some extent to differences in classification.

A more rational attitude towards the treatment of mental cases has resulted in a greater willingness in recent years to submit afflicted persons to treatment at an earlier stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an actual increase in insanity.

(vii) *Causes of Insanity.* The general information available respecting the causes of the insanity of persons admitted to institutions is too unsatisfactory to be given in detail.

(viii) *Length of Residence in Hospital, 1935.* (a) *New South Wales and Victoria.* Particulars are not available regarding the average length of residence in hospitals of persons who died or were discharged during the year.

(b) *Queensland.* The average residence of those who died during the year was 8 years 335 days for males, and 6 years 92 days for females; of those discharged, 1 year 77 days for males, and 1 year 249 days for females.

(c) *South Australia.* The average residence of those who died during the year was 11 years 6 months 16 days for males, and 9 years 1 month 15 days for females; of those discharged, 9 months 5 days for males, and 1 year 8 months 11 days for females.

(d) *Western Australia.* The average residence of those who died was 10 years 1 month 25 days for males, and 4 years 7 months 1 day for females; of those discharged, 2 years 8 months 26 days for males, and 3 years 10 months and 5 days for females.

(e) *Tasmania*. The average residence of those who died during the year was 17 years 10 months and 10 days for males, and 9 years 9 months and 22 days for females; of those discharged, 3 years 9 months and 20 days for males and 1 year 1 month and 12 days for females.

6. *Care of the Feeble-minded*.—An account of the treatment of the feeble-minded, supplied by the Public Health Department of Tasmania, appeared in *Official Year Book No. 19*, pp. 477 and 478.

7. *Protection of Aborigines*.—For the protection of the aboriginal Australian race there are institutions, under the supervision of Aborigines Boards, where these people are housed and encouraged to work, the children receiving elementary education. The work is usually carried on at mission stations, but many of the natives are nomadic, and receive food and clothing when they call, whilst others but rarely come near the stations. The native race is extinct in Tasmania. The expenditure from Consolidated Revenue in 1935–36 was: New South Wales, £50,610; Victoria, £7,817; Queensland, £46,486; South Australia, £28,719; Western Australia, £24,174; Northern Territory, £6,921; total for Australia, £164,727. According to the latest census taken by the Commonwealth Bureau of Census and Statistics, the numbers of full-blood and half-caste aborigines living in supervised camps in each State at 30th June, 1936, were as follows:—

ABORIGINES.(a)—AUSTRALIA—30th JUNE, 1936.

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Northern Territory.	Total
	No.	No.	No.	No.	No.	No.	No.
Full-bloods ..	483	47	8,295	69	2,253	5,966	17,113
Half-castes ..	3,504	136	2,963	804	1,254	648	(b)9,621

(a) Living in supervised camps. See letterpress above table. (b) Including 233 in Tasmania and 70 in the Federal Capital Territory.

Particulars regarding total numbers of aborigines in each State will be found in the Chapter dealing with Population.

8. *Royal Life Saving Society*.—In each of the State capitals, “centres” of the Royal Life Saving Society have been established, and in some States sub-centres have also been established in the larger provincial districts. Recently an Australian Federal Council of this Society has been formed with head-quarters at Melbourne, and each State centre or branch as it is now called is controlled by the new Organization. Saving of life from drowning and other forms of asphyxiation is the object of the Society, and its immediate aims are (a) educative and (b) remedial. The encouragement of swimming and life-saving in schools, colleges, clubs, etc., will bring about a more widespread knowledge of these necessary matters, and there is increasing provision of life-belts, reels, lines, and other first-aid appliances on ocean beaches, wharves and other suitable places. Numerous certificates of proficiency in various grades are issued annually after examination throughout Australia, the numbers for the individual States for 1936 being:—New South Wales, 7,819; Victoria, 1,557; Queensland, 1,183; South Australia, 768; Western Australia, 1,303; Tasmania, 121; and Fiji, which comes under the control of the Australian Federal Council, 22.

9. *Royal Humane Society*.—The Royal Humane Society of Australasia has for its objects (a) to grant awards for skill, promptness and perseverance in life-saving, where the rescuer has risked his or her life; (b) to provide assistance in cases of danger and apparent death; (c) to restore the apparently drowned; (d) to collect and circulate the latest information regarding approved methods and apparatus for life-saving. Awards of medals and certificates are made numbering about 100 annually. Upwards of 300 lifebuoys have been provided at various places on the coasts, rivers, lakes and reservoirs in the various States. Swimming is encouraged amongst school children, and awards are made for proficiency.

10. **Other Charitable Institutions.**—Owing to variety of name and function of other charitable institutions it has been found impracticable to give detailed results. The aid given in kind—food, clothing, tools of trade, etc.—is considerable, whilst the shelter and treatment afforded range from a bed for a night for casual callers in establishments ministering minor charity, to indoor treatment over long periods in those that exist for the relief of the aged and the infirm. The institutions not so particularized include asylums for the deaf, dumb and blind, infant homes, homes for the destitute and aged poor, industrial colonies, night shelters, crèches, homes of hope, rescue homes, free kindergarten and ragged schools, auxiliary medical charities, free dispensaries, benevolent societies and nursing systems, ambulance and health societies, boys' brigades, humane and animals' protection societies, prisoners' aid associations, shipwreck relief societies, bush fires and mining accident relief funds, etc.

11. **Total Expenditure on Charities.**—Issues of the Official Year Book, prior to No. 24, embodied statistics of expenditure on charities. The returns available, however, included a portion only of direct expenditure by Governments, and, in general, there is lack of harmony in the information available for the different States. Pending the result of further inquiry it has been decided to omit this table from the present chapter.

CHAPTER IX. PUBLIC HYGIENE.

§ 1. Public Health Legislation and Administration.

Reference to the various public health authorities, Commonwealth and State, their functions, and the legislation administered, may be found in earlier issues of the Official Year Book (*see* No. 22, pp. 493 to 495).

§ 2. Inspection and Sale of Food and Drugs.

Legislation in force in all States provides for the inspection of food and drugs with the object of assuring that all those goods which are sold shall be wholesome, clean and free from contamination or adulteration; and that all receptacles, places and vehicles used for their manufacture, storage or carriage shall be clean. For further particulars in this connexion, and with respect also to the sale and custody of poisons, reference should be made to Official Year Book, No. 22, pp. 495-497.

§ 3. Supervision of Dairies, Milk Supply, Etc.

1. **General.**—In earlier issues (*see* No. 22, p. 498), allusion is made to the legislation in force in the various States to ensure the purity of the milk supply and of dairy produce generally.

2. **Number of Dairy Premises Registered.**—The following table shows, so far as the particulars are available, the number of dairy premises registered and the number of cattle thereon. With regard to the latter the figures are not comparable as milch cows only are collected in some States, while others return all cattle depastured on registered premises. In some States also registration is compulsory within certain proclaimed areas only.

DAIRY PREMISES REGISTERED, AND CATTLE THEREON, 1936.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (c)	Tasmania.
Premises registered ..	22,740	25,703	27,349	12,340	175	8,502
Cattle thereon ..	1,157,584	549,143	1,006,131	(a)97,615	5,770	(b)

(a) Estimated.
Hall only.

(b) Not available.

(c) Premises within a reserve radius of the Perth Town.

§ 4. The National Health and Medical Research Council.

In 1926, the Commonwealth Government established a Federal Health Council, in accordance with a recommendation of the Royal Commission on Health (1925), "for the purpose of securing closer co-operation between Commonwealth and State Health Authorities". This Council held sessions each year except 1932. In 1936, the Commonwealth Government decided to create a body with wider functions and representation, and the National Health and Medical Research Council was established with the following functions:—

- To advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research;
- To advise the Commonwealth Government as to the expenditure of money specifically appropriated as money to be spent on the advice of this Council;
- To advise the Commonwealth Government as to the expenditure of money upon medical research and as to projects of medical research generally;
- To advise Commonwealth and State Governments upon the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition.

The constitution of the Council consists of the Commonwealth Director-General of Health as Chairman, with two officers of his Department, the official head of the Health Department in each State, together with representatives of the Federal Council of the British Medical Association, the Royal Australasian College of Surgeons, the Australian Association of Physicians, and (jointly) the four Australian Universities having medical schools. A prominent layman and laywoman, appointed by the Commonwealth Government, also serve on the Council.

The first session of the National Health and Medical Research Council met at Hobart in February, 1937.

§ 5. The Commonwealth Advisory Council on Nutrition.

During 1935, Australian delegates to the Assembly of the League of Nations and the International Labour Conference were largely instrumental in inspiring a concerted international inquiry into world-wide problems of nutrition, with a view to improving the public health by greater consumption of protective foods for the prevention of malnutrition and the benefit of agriculture. Within Australia itself, in 1936, the Commonwealth Government appointed a Commonwealth Advisory Council of Nutrition, under the chairmanship of the Commonwealth Director-General of Health, and composed of experts representing health and agricultural interests, the Commonwealth Council for Scientific and Industrial Research, the University medical schools and the practising medical and dental professions.

The initial inquiries of this Council were framed to enable advice to be given to the Government upon two principal aspects of the problem: (a) the present state of nutrition of the Australian people; and (b) the nature of any evidence that the Australian people are in any degree under nourished, or that their diet is improperly balanced or improperly prepared.

These inquiries have proceeded along two main lines of activity, a survey of household dietaries in Sydney, Melbourne, Brisbane and Adelaide, and a survey of the nutritional state of children in inland areas. The statistical compilation of the records obtained and parallel work of chemical analysis are being carried out by special technical staff at the School of Public Health and Tropical Medicine, Sydney. The local organization of the inquiry has been furthered by the appointment of State committees. It is intended that the preliminary work of these surveys will be completed by the end of August, 1937.

§ 6. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts in regard to the compulsory notification of infectious diseases and the precautions to be taken against the spread thereof may be conveniently dealt with under the headings—Quarantine; Notifiable Diseases, including Venereal Diseases; and Vaccination.

2. **Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and uniformity of procedure has been established in respect of all vessels, persons and goods arriving from overseas ports or proceeding from one State to another, and in respect of all animals and plants brought from any place outside Australia. In regard to interstate movements of animals and plants, the Act becomes operative only if the Governor-General be of opinion that Federal action is necessary for the protection of any State or States; in the meantime the administration of interstate quarantine of animals and plants is left in the hands of the States. The Commonwealth possesses stations in each State for the purposes of human and of animal quarantine.

Further information concerning the chief provisions of the Act and its administration is given in some detail in earlier issues (*see* No. 22, p. 500).

3. **Notifiable Diseases.**—A. **General.**—(i) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread and for the compulsory notification of infectious disease. When any

such disease occurs, the local authority must at once be notified, and in some States notification must be made to the Health Department also. The duty of giving this notification is generally imposed, first, on the head of the house to which the patient belongs, failing whom on the nearest relative present, and, on his default, on the person in charge of or in attendance on the patient, and on his default, on the occupier of the building. Any medical practitioner visiting the patient is also bound to give notice.

As a rule the local authorities are required to report from time to time to the Central Board of Health in each State as to the health, cleanliness and general sanitary state of their several districts, and must report the appearance of certain diseases. Regulations are prescribed for the disinfection and cleansing of premises, and for the disinfection or destruction of bedding, clothing, or other articles which have been exposed to infection. Bacteriological examinations for the detection of plague, diphtheria, tuberculosis, typhoid and other infectious diseases within the meaning of the Health Acts are continually being carried out. Regulations are provided in most of the States for the treatment and custody of persons suffering from certain dangerous infectious diseases, such as small-pox and leprosy.

(ii) *Details by States.* In earlier Year Books (see No. 22, p. 501) information was given concerning the notification, etc., of diseases under State headings.

(iii) *Diseases Notifiable and Cases Notified in each State and Territory.* The following table, which has been compiled by the Commonwealth Department of Health, shows for the year 1936 the diseases which are notifiable in each State and Territory and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY AND NOTIFICATIONS FOR THE YEAR ENDED 31st DECEMBER, 1936.

Disease.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Fed. Cap. Ter.	Aust.
Ankylostomiasis ..	*	..	7	..	I	..	..	..	8
Anthrax ..	*	..	I	..	..	..	..	..	I
Beri-Beri ..	*	..	*	..	..	..	..	..	..
Bilharziasis ..	*	..	..	..	..	..	17	..	17
Cerebro-spinal Meningitis ..	II	15	3	2	I	4	..	..	36
Cholera ..	..	..	..	..	..	..	..	..	..
Coastal Fever (a) ..	..	..	..	..	..	..	..	..	..
Dengue Fever ..	..	..	4	..	..	..	..	..	4
Diphtheria ..	..	..	..	..	..	..	219	..	219
Dysentery (b) ..	7,064	5,218	1,346	1,279	741	572	7	56	16,283
Encephalitis Lethargica ..	..	7	..	9	4	..	I	..	21
Erysipelas ..	7	3	4	2	..	..	..	..	16
Favus ..	..	..	..	121	..	..	2	..	123
Filariasis ..	..	..	..	..	..	..	..	..	..
Helminthiasis ..	..	2	..	..	..	..	..	..	..
Hydatid ..	..	..	..	..	..	..	..	..	2
Influenza ..	..	15	..	..	..	..	..	..	15
Leprosy ..	..	..	..	135	..	..	204	..	339
Malaria ..	3	..	7	..	7	..	I	..	18
Measles ..	..	5	9	..	..	..	5	..	19
Mumps ..	..	..	..	88	..	..	..	..	99
Plague ..	..	..	..	198	..	..	..	..	198
Polio-myelitis ..	..	..	..	..	..	..	..	..	..
Psittacosis (c) ..	22	7	13	5	3	..	..	..	50
Puerperal Fever ..	..	7	..	..	..	..	..	..	7
Scarlet Fever ..	326	55	36	89	8	30	..	I	545
Smallpox ..	3,939	2,122	796	397	175	477	..	18	7,924
Tetanus ..	..	..	..	..	..	..	..	..	..
Trachoma ..	..	16	..	..	..	..	..	..	16
Tuberculosis (d) ..	..	I	..	..	..	..	..	..	I
Typhoid Fever (e) ..	1,372	814	242	266	273	163	4	2	3,136
Typhus (Endemic) (f) ..	132	60	78	52	62	8	..	..	392
Varicella ..	4	..	70	13	38	..	..	..	125
Well's Disease ..	..	..	..	1,423	..	..	37	..	1,460
Whooping Cough ..	..	..	54	..	..	..	..	..	54
Yellow Fever ..	..	..	..	751	..	..	..	2	753

(a) Includes Mossman and Sarina fever. (b) Includes amoebic and bacillary. (c) Notifiable since 12th February, 1936. (d) Includes all forms except in New South Wales and Northern Territory where only pulmonary tuberculosis is notifiable. (e) Includes enteric fever and paratyphoid. (f) Cases reported are all of the mild type known as Brill's disease or endemic typhus.

B. Venereal Diseases.—(i) *General.* The prevention and control of venereal diseases are undertaken by the States. Each State has a Venereal Diseases Act, or provisions in the Health Act govern the working of the measures taken to combat these diseases. Under these Acts notification has been made compulsory in every State except South Australia, where the Venereal Diseases Act has not yet been proclaimed. Steps have been taken to ensure free treatment by medical practitioners or in subsidized hospitals and clinics. Registered pharmaceutical chemists are allowed to dispense prescriptions only when signed by medical practitioners. Clinics have been established and, in some cases, beds in public hospitals have been set aside for patients suffering from these diseases.

Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person or the employment of an infected person in the manufacture or distribution of foodstuffs.

For several years the Commonwealth Government granted a subsidy to each of the States to assist in providing hospital treatment and administrative control of venereal diseases, but this subsidy has been discontinued.

In 1927 a Division of Tuberculosis and Venereal Disease was established in the Commonwealth Department of Health, with a medical officer as Director. This Division ceased to exist in April, 1932.

(ii) *Details by States.* A statement of the preventive provisions in each State, together with certain statistical data, appeared in earlier Year Books (*see* No. 22, pp. 503 and 504).

4. Vaccination.—(i) *Demand for Vaccine.* In New South Wales there is no statutory provision for compulsory vaccination, though in all the other States such provision exists. Jennerian vaccine for vaccination against small-pox is prepared at the Commonwealth serum laboratories in Melbourne. A moderate demand exists for the vaccine in Victoria, but in the other States the normal requirements are small, as is also the proportion of persons vaccinated.

(ii) *Details by States.* In earlier issues of the Year Book (*see* No. 22, pp. 504 and 505) information was given concerning the provisions regarding vaccination in each State.

5. Commonwealth Serum Laboratories.—The establishment for the preparation of Jennerian vaccine situated at Royal Park, near Melbourne, formerly known as the "Calf Lymph Depot," was in 1918 greatly enlarged by the Commonwealth. The remodelled institution is designated the "Commonwealth Serum Laboratories," and is administered by the Commonwealth Department of Health. The list of biological preparations produced by the laboratories has been extended to cover a wide range, thus forming a valuable national provision for the protection of public health.

6. Health Laboratories.—The Commonwealth Department of Health has established health laboratories at Rabaul in New Guinea, at Lismore in New South Wales, at Bendigo in Victoria, at Townsville, Toowoomba, Rockhampton and Cairns in Queensland, at Port Pirie in South Australia, at Kalgoorlie in Western Australia, at Launceston in Tasmania and at Darwin in the Northern Territory. A laboratory at Broome, Western Australia, was opened in June, 1937.

The laboratory at Rabaul, which until 1930 was carried on in conjunction with the hookworm campaign, and was working in close co-operation with the health organization of the New Guinea Administration, was formally transferred to the Administration at the beginning of 1930.

The Bendigo Laboratory, which was the first of these laboratories to be established, was opened in 1922. Besides carrying on the ordinary diagnostic and educational work of a health laboratory, it possesses an X-ray equipment, and undertakes the examination, diagnosis and treatment of persons suffering from miner's disease and tuberculosis.

By arrangements between the Commonwealth and Western Australian Governments a special medical survey of persons engaged in the mining industry in Western Australia was carried out in 1925-26 by the Commonwealth Health Laboratory at Kalgoorlie. A further arrangement provided for the re-examination annually of mine employees in the Kalgoorlie district, and, by means of a mobile X-ray unit, in outlying districts. This work is still being carried out.

7. **Industrial Hygiene.**—The Industrial Hygiene Division of the Commonwealth Department of Health was established in December, 1921. Its objects were the collection of reliable data, the investigation of industrial conditions affecting health, and the issue of advice to employers and employees for the improvement of conditions of work and for the safeguarding of health. Publications were issued dealing with the scope of industrial hygiene, and with health hazards in industry. With a view to the adoption of a concerted scheme of action and a uniform basis for standards and records throughout Australia, conferences of delegates from the State Health and Labour Departments and the Commonwealth Department of Health were held in 1922, 1924 and in 1927. This Division ceased to exist with the reorganization of the Department in April, 1932.

A special article entitled "Industrial Hygiene in Australia" will be found in Official Year Book No. 18, pp. 522 to 555.

8. **Veterinary Hygiene and Plant Quarantine.**—In 1927 Directors were appointed to control divisions of the Commonwealth Department of Health, which have been created to deal with veterinary hygiene and plant quarantine.

§ 7. Tropical Diseases.

1. **General.**—The remarkable development of parasitology in recent years, and the increase in knowledge of the part played by parasites in human and animal diseases, have shown that the difficulties in the way of tropical colonization, in so far as these arise from the prevalence of diseases characteristic of tropical countries, are largely removable by preventive and remedial measures. Malaria and other tropical diseases are coming more and more under control, and the improvements in hygiene and the production of new synthetic drugs for treatment which science has accomplished, have resulted in a new outlook on the question of white settlement in countries formerly regarded as unsuitable for colonization by European races. In Australia the most important aspect of this matter is at present in relation to such diseases as hookworm, filariasis, dengue fever and malaria, which, although practically unknown in southern Australia, occur in many of the tropical and sub-tropical parts.

A Division of Tropical Hygiene of the Commonwealth Department of Health was established to deal with these diseases and other aspects of tropical hygiene. This Division ceased to exist as such with the reorganization of the Department in April, 1932.

2. **Transmission of Disease by Mosquitoes.**—Information under this heading has appeared in earlier issues (*see* No. 22, pp. 506 and 507).

3. **Control of Introduced Malaria and Bilharziasis.**—Reference to this subject may be found in earlier Year Books (*see* No. 22, p. 507).

4. **Hookworm.**—Reference to this subject may be found in earlier Year Books (*see* No. 25, pp. 416 and 417).

5. **Australian Institute of Tropical Medicine.**—The Australian Institute of Tropical Medicine was founded at Townsville in January, 1910. From 7th March, 1921, to 3rd March, 1930, when it was merged in the School of Public Health and Tropical Medicine, Sydney University, the Institute was administered by the Commonwealth Department of Health, and a full account of its activities from its foundation up to 1922 will be found in Official Year Book No. 15, pp. 1010-1012.

6. **School of Public Health and Tropical Medicine, Sydney University.**—The Commonwealth Government, under an agreement with the Sydney University, established a School of Public Health and Tropical Medicine at the Sydney University as from 4th March, 1930, for the purpose of training medical graduates and students in the subjects of public health and tropical medicine. The organization of the Australian Institute of Tropical Medicine at Townsville was merged in the new School, and the staff, equipment and material have been transferred to Sydney.

The work of the School comprises both teaching and investigation. Courses are held for the University post graduate diploma of public health and the diploma of tropical medicine and tropical hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Other classes include students in architectural, social, and school hygiene, and lay officers and nurses in the tropical service and missionaries. Three classes of native medical assistants from Papua have attended a special course of instruction at the School.

Investigational work covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out not only in Australia but in co-operation with the local administrations in Papua, New Guinea, Norfolk Island and Nauru. Further details may be found in previous Year Books (*see* No. 29, p. 334).

7. **Royal Commission on National Health, etc.**—Information concerning the following subjects may be found in previous Year Books (*see* No. 22, pp. 509 and 510):—(a) Royal Commission on National Health appointed by the Commonwealth Government in 1924; (b) Travelling Study Tours under the League of Nations; (c) International Sanitary Convention; and (d) Far Eastern Epidemiological Bureau, Singapore.

8. **International Pacific Health Conferences, 1926 and 1935.**—In Official Year Books No. 22, page 510, and No. 29, page 334, information was given relating to the First International Pacific Health Conference which met at Melbourne in December, 1926, and the second Conference convened by the Commonwealth Government at Sydney in September, 1935.

§ 8. Organization for the Control of Cancer.

The persistent increase in cancer mortality has led to the development in Australia of a national organization directed towards the control of this disease. Treatment centres, fully equipped to carry out investigation and treatment by all modern methods have been formed at the principal hospitals. A large amount of radium, purchased in 1928 by the Commonwealth Government for use in treatment and research, has been distributed on loan to the treatment centres. Treatment is available to all requiring it irrespective of ability to pay. The work is co-ordinated by the Commonwealth Department of Health. Records of treatment and the results obtained are kept by all treatment centres on uniform lines and are collected and analysed. Close co-operation is maintained between research workers, physicists and bio-chemists and the medical men engaged in the clinical investigation and treatment of the disease so that problems are mutually investigated. An annual conference known as the Australian Cancer Conference is held at which those actively engaged in the campaign against the disease meet for the discussion of problems and the determination of lines of action. The report of this conference is published by the Commonwealth Department of Health and is widely distributed.

At the Melbourne University the Commonwealth Government maintains a radium laboratory for the purposes of the production of radon for use in treatment, the construction and repair of radium apparatus and for research into problems of treatment and protection. During the year 1935 a total of 10,221 millieuries of radon were issued by this laboratory and used in the treatment of cancer and in the prosecution of research. This represents an increase of 38 per cent. on the output for the previous year.

Realizing the essential importance of accuracy in determining the quality of X-rays used in the treatment of cancer and in measuring the dosage of the radiation delivered to a patient under treatment, and the need for the investigation of physical problems in connexion with the utilization of X-rays and radium in the treatment of disease, the Commonwealth Government decided to extend the scope of the work of the Commonwealth Radium Laboratory, and in conjunction with the Council of the University of Melbourne, has established a Commonwealth X-ray and Radium Laboratory at the University. Special accommodation has been provided by the University for this laboratory, which is now actively at work.

Local physical services in relation to the use of radium and X-rays have been or are being developed in the capital cities of the several States.

§ 9. Medical Inspection of School Children.

1. **General.**—Medical inspection of school children is carried out in all the States. Medical staffs have been organized, and in some States travelling clinics have been established to deal with dental and ocular defects.

2. **New South Wales.**—A complete system of medical inspection of school children came into operation in this State in 1913. The scheme includes, in country districts, the medical examination of every child at least twice during the usual period of school attendance (6-14 years). In the metropolitan area, the scheme provides for the full medical examination of all "entrants" and children 13 years of age, and the review of all children found defective between those ages. Parents are notified of the defects found, and urged to have them treated. In the metropolitan area, these notices are reinforced by "follow up" work of school nurses, who also arrange hospital and clinic treatment in many cases.

In 1936 the staff comprised 13 medical officers (including a psychiatrist for the Child Guidance Clinic, and two oculists), 9 dental officers, 8 dental assistants, 8 school nurses and 6 clerical officers. Four medical officers were engaged in country districts, and 7 in the metropolitan area, and of the 9 travelling dental clinics (8 of which were each staffed by a dental officer and dental assistant), 4 were engaged in metropolitan schools and 5 in country districts. One of the metropolitan officers was also engaged half-time at the clinic attached to the Out-patients' Department of the Royal Alexandra Hospital for Children.

Special attention is paid to the supervision of the health of High School pupils, both girls and boys, and High Schools in the metropolitan area, as well as certain country schools, are medically inspected annually.

Every student, before entering the Teachers' Colleges, is medically examined, and any defects found must be remedied before final acceptance. Health supervision is maintained at these Colleges by women Medical Officers—whole-time at the Sydney College and part-time at the Armidale College. Also, a course of lectures on hygiene, which every student attends, is given by these officers.

The medical and psychological examination of delinquent boys brought before the Children's Court is carried out by a male Medical officer, who examined 601 boys in 1935, and 982 in 1936. In the case of girl delinquents, similar examinations are made by a woman medical officer.

Towards the end of 1936 a Child Guidance Clinic was established by the Education Department. This Clinic functions as part of the School Medical Service, a psychiatrist having been appointed to take charge of the work of the clinic. Cases are referred through School Medical officers, teachers, and officers of the Child Welfare Department, no fee being charged for any examinations.

The medical and/or psychological examination of many children referred from schools, also children under the jurisdiction of the Child Welfare Department, Widows' Pensions Branch (Family Endowment Department) and Soldiers' Children Education

Board is also carried out by medical officers of this service, either at this Department, or at Child Welfare Department institutions. The total examined in this way, including those examined at the Child Guidance Clinic, during 1936, was 811.

The following summary furnishes particulars of children medically examined in schools in 1936:—

Number fully examined (routine inspection)	..	..	47,973
Number reviewed	..	..	24,529
Number fully or partly examined (miscellaneous)	..	..	3,110
Of those examined—percentage notified for defects, medical and/or dental	..	..	37.6 per cent.

These figures do not include record of the medical examination and health supervision of children in residence at the Glenfield Special School for backward children, which is carried out by a woman medical officer; or a total of 227 children medically examined at Stewart House Preventorium and the Christmas Camp organized under the Far West Children's Health Scheme.

Periodical and or regular investigations are carried out into problems affecting the health of children, such as goitre, crippling, mental deficiency, stammering, left handedness, nutrition, trachoma, acute rheumatism; and special investigations into outbreaks of infectious diseases occurring in schools. The sanitary condition of school buildings is also inspected and reported on.

The above statement does not include record of the numerous medical examinations of teachers, and other Departmental work of a medical nature, done by the School Medical Service.

3. Victoria.—The system adopted provides for the medical examination of each child once every three years during its school life. With the doubling of the medical staff in 1925 the Department concentrated on country work, and medical inspection has been undertaken since that date in country and rural districts, reaching the most remote corners of the State. Medical inspection is now undertaken in all high schools, in practically all country State schools, and in about half of the metropolitan State schools, but in only a few of the registered and institutional schools.

Each school is visited once in every three years, and each child examined. At this inspection every child is first weighed and measured, vision and hearing tested, then undressed to the waist and medically examined as for life assurance, but with a fuller investigation of many hygienic factors, which at that age greatly influence the health and growth of the child. Opportunity is also taken to teach the child healthy habits, how to correct faults, also to get its co-operation for the remedying of defects found. In schools with an attendance of 70 or more, the older boys are examined by a medical man and the older girls by a medical woman. A school nurse employed by the Department is devoted to "follow-up" work, *i.e.*, visiting the homes and getting treatment for children found defective by the school medical officers. Owing to the smallness of the staff her work is confined to the metropolitan area.

In addition to the medical examination, each child in those schools visited by the school dentist receives dental treatment on entrance to school (if under 8 years of age), and each year thereafter, until it is 12 years of age, when it is left dentally fit. The present staff is arranged so that 3 dentists and 4 dental attendants are always on duty at the Melbourne Dental Centre, where children from the infant classes in the inner metropolitan schools are brought by the teacher for dental treatment. A dentist with a dental attendant and equipment travels along the railway line far enough to give one year's work, using practically every town large enough to provide a day's work as a base. The school committees of the outlying schools are notified of the visit, and the parents are invited to bring to the base all children eligible for treatment, *i.e.*, all children under 8 years of age, and all other children treated by the school dentists on previous visits. The time of

another dentist is fully occupied treating the children in the three largest country centres, Bendigo, Ballarat and Geelong. In each of these cities a centre with a dentist, dental attendant and equipment is established for about four months of the year, where children from the infant classes of the neighbouring schools are brought by the teacher or parents. Three dentists with dental attendants are in charge of three fully-equipped dental vans, each of which has an itinerary which it completes each year.

The staff of the medical branch consists of 7 full-time medical officers, 9 dentists, 10 dental attendants and 2 school nurses.

During the year ended 30th June, 1936, 38,416 children and 1,675 teachers were medically examined, and 32,847 children received dental treatment. In addition, 9,923 homes were visited by the school nurse.

4. Queensland.—Medical inspection of schools and school children is carried out by one full-time medical officer and one part time officer under the general direction of the Chief Medical Officer of Schools. These officers, as far as possible, examine children for cardiac and pulmonary conditions, and in addition, make a thorough examination of all children referred to them by the school nurses: 3,809 were thus medically examined in 1936, and of these 2,352 were notified as suffering from some condition requiring correction.

The nurses now number fourteen. Each nurse is assigned a group of schools, and she is instructed to make a list at each school of those children who she considers should be seen by the medical inspector at his next visit. She supervises the sanitation, cleanliness and ventilation of the school and notifies the head teacher of all infectious or verminous children or those suffering from impetigo, scabies, etc., who are then excluded. During the year 1936, school nurses examined 32,422 children. In the metropolitan area the nurses examine the teeth and report all eligible carious cases to the Dental Hospital for treatment.

The Department has in its employ a staff of fifteen dentists. These officers are each assigned a district, and such district is not changed for three years unless for reasons which the Chief Medical Officer, on the recommendation of the Chief Dental Inspector, considers advisable. During the year 1936, 25,356 children were examined; 30,597 extractions were performed; and there were 48,375 fillings and 15,001 other treatments.

The Medical Branch, under the direction of the Chief Medical Officer, consists of three sections known as the Medical, Dental and Nursing Sections. These constitute the School Medical Service of the State.

At the Wilson Ophthalmic School Hostel children suffering from trachoma are treated and educated. They are admitted from time to time on the recommendation of the Chief Medical Officer. Beneficial results have already been obtained. The Institution is situated at Eildon Hill, Windsor, and is fully equipped to treat all types of eye case.

The work of Hookworm Control (the dealing with ankylostomiasis duodenale and Necator Americanus infestation) throughout the State is under the control of the Director-General of Medical Services and his deputy. This activity has resulted in a marked reduction in the incidence of this dangerous menace on the northern coastal belt. Several sisters of the School Medical Service are seconded for hookworm duty. The personnel consists of a microscopist, a health inspector and five trained sisters.

In order to give the same medical and dental facilities to the children of the back country as are obtainable by city dwellers, a Rail Dental Clinic equipped on the most modern lines has been constructed. A motor car is carried on a railway waggon at the rear for use at each stopping place to visit the surrounding villages served by the rail centre. Two road motor clinics have also been provided. One functions in the south-western portion of the State with Charleville as a base, while the other operates in the central-west and the north-western territory using Longreach as the centre. The staff of each clinic consists of one qualified dental surgeon and one motor mechanic.

5. **South Australia.**—The system of medical inspection in force requires the examination of all children attending primary, central, high and technical high schools. Children in the primary schools are examined in grades I., IV. and VII.; in the central schools in grade X., while high school children are reexamined in their second and fourth years. Reports are furnished to the parents of any remediable defects found during these examinations. The medical inspectors meet the parents after the examination of the children and give an address on the prevention and treatment of the conditions which were found during the inspection. After these lectures the parents are given an opportunity to ask questions regarding their children. When there is an epidemic or a threatened epidemic in a district, similar lectures are given and special visits paid to all the schools in that locality. All students are examined before they enter the Teachers' College. Courses of lectures in Hygiene and in First Aid are given to these students.

The medical staff consists of a principal medical officer, two medical inspectors and a trained nurse. A psychologist, two dentists and two dental assistants are attached to the Medical Branch. The psychologist, in addition to examining retarded children and supervising their work in the opportunity classes, lectures to the students at the Teachers' College, and examines children referred to her by the Children's Court, by the Women Police, or by the Children's Welfare Department, etc.

During the year 1936, 12,002 children were examined by medical inspectors; of these 281 required notices for defective vision, 66 for defective hearing, and 619 for tonsils and adenoids. Six hundred and forty children were examined by the psychologist.

6. **Western Australia.**—Under the Public Health Act 1911-1935 the medical officers of health appointed by the local authorities became medical officers of schools and of school children. The principle aimed at is that each child shall be examined twice during its school life, once between the ages of 7 and 8 years and again between the ages of 12 and 13 years. In the Health Department there are two full-time medical officers for schools, whose duty is to conduct medical examinations, and two school nurses are employed. During 1936, 11,886 (5,290 country and 6,596 metropolitan) children were examined. In addition 3,136 metropolitan and 11 country school children were re-examined. There were 96 schools visited in the metropolitan area and 148 in country districts.

Three dental officers visited 43 schools and gave attention to 3,709 children.

7. **Tasmania.**—Tasmania was the first State in Australia to provide for the medical inspection of State school children, its system of inspection having been initiated in 1900. During the year 1931, however, for financial reasons, medical inspection ceased, and the services of all doctors were terminated.

At the present time (1937), two part-time medical officers conduct examinations of school children in Hobart and Launceston, and in addition four nurses visit the homes to advise the parents as to the treatment of defects disclosed by the medical examination. Prior to 1931 the various municipal health officers were employed as medical inspectors visiting country schools, and, in the case of epidemics, these officers paid special visits when required. Country schools were visited by medical officers about once a year. There are six full-time dental officers working at dental clinics in Hobart and Launceston, and visiting the country schools.

8. **Federal Capital Territory.**—By arrangement education facilities are provided by the Education Department of New South Wales. The Commonwealth Department of Health, however, took over from the State in 1930 the medical inspection of school children and carried out examinations of entrants and those leaving during 1930.

Subsequent to 1931, examinations of entrants and those leaving the primary schools have taken place. Of the 245 children examined in 1931, 50.2 per cent. showed dental defects, 15.1 per cent. had some pathological condition of the nasopharynx, 0.8 per cent. showed some evidence of minor deformity, 6.1 per cent. had eye defects, 4.5 per cent. had ear defects, and 3.3 per cent. were 10 per cent. or more underweight.

§ 10. Supervision and Care of Infant Life.

1. *General.*—The number of infantile deaths and the rate of infantile mortality for the last five years are given in the following table, which shows that during the period 1932 to 1936 no less than 22,906 children died in Australia (excluding Territories) before reaching their first birthday. With few exceptions the rate of mortality in the metropolitan area is consistently greater than that for the remainder of the State. Further information regarding infantile mortality will be found in Chapter XIV.—Vital Statistics :—

INFANTILE DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.			
	1932.	1933.	1934.	1935.	1936.	1932.	1933.	1934.	1935.
NUMBER OF INFANTILE DEATHS.									
New South Wales	686	630	732	602	738	1,154	1,109	1,277	1,160
Victoria ..	630	549	637	570	605	551	599	605	578
Queensland ..	215	180	181	190	185	483	553	524	460
South Australia..	149	129	151	133	123	163	157	150	156
Western Australia	164	118	136	139	150	191	172	183	187
Tasmania ..	48	52	45	72	53	137	135	144	159
Australia (b) ..	1,892	1,658	1,882	1,706	1,860	2,670	2,725	2,883	2,706
RATE OF INFANTILE MORTALITY.(a)									
New South Wales	39.01	36.80	44.26	35.61	41.73	42.26	40.96	47.65	41.77
Victoria ..	47.67	40.68	48.42	42.01	41.06	38.77	41.21	41.24	39.51
Queensland ..	50.00	41.57	42.30	42.11	41.73	38.36	40.01	40.04	38.51
South Australia..	38.70	31.77	39.00	38.11	38.71	34.03	32.44	32.02	34.00
Western Australia	47.51	34.05	41.25	40.35	44.24	42.30	38.49	40.03	40.23
Tasmania ..	48.83	48.87	40.54	73.47	50.48	39.05	38.69	42.86	45.74
Australia (b) ..	43.61	38.14	44.64	39.90	41.18	39.80	39.73	42.97	39.71

(a) Number of deaths under one year per 1,000 births registered.

(b) Exclusive of Territories.

During recent years greater attention has been paid to the fact that the health of the community depends largely on pre-natal as well as after care in the case of mothers and infants. Government and private organizations, therefore, provide instruction and treatment for mothers before and after confinement, while the health and well-being of mother and child are looked after by the institution of baby health-centres, baby clinics, crèches, visits by qualified midwifery nurses, and special attention to the milk supply, etc.

2. *Government Activities.*—In all the States acts have been passed with the object of supervising and ameliorating the conditions of infant life and reducing the rate of mortality. Government Departments control the boarding-out to suitable persons of the wards of the State, and wherever possible the child is boarded-out to its mother or near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children. (See also in this connexion Chapter VIII.—Public Benevolence.) Under the provisions of the Maternity Allowance Act 1912-1936, a sum of four pounds ten shillings is payable to the mother in respect of each confinement at which a living or viable child is born, provided the total income of the claimant and her husband for the period of twelve months preceding the date of the birth did not exceed £221. Where a mother already has one or more children under 14 the amount payable is £5, with an income limit of £312. Further particulars regarding Maternity Allowance are given in Chapter XXVII.—Public Finance.

3. **Nursing Activities.**—(i) *General.* In several of the States the Government maintains institutions which provide treatment for mothers and children, while, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details by States.* In earlier issues of the Year Book (*See* No. 22 pp. 515 and 516) information, with certain statistical data, concerning the activities of institutions in each State may be found.

(iii) *Summary.* The following table gives particulars of the activities of the Baby Health Centres and the Bush Nursing Associations:—

BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1936.

Heading.		New South Wales	Victoria (b)	Queensland. (b)	South Australia.	Western Australia. (b)	Tasmania.	Federal Capital Territory. (b)	Total.
Baby Health Centres—									
Metropolitan	No.	51	70	15	40	13	2	6	197
Urban-Provincial and Rural	No.	109	91	50	17	10	18	..	295
Total	No.	160	161	65	57	23	20	6	492
Attendances at Centres ..									
Visits paid by Nurses ..	No.	674,588	452,612	108,001	95,075	86,244	31,810	3,868	1,512,198
Bush Nursing Association—Number of Centres ..	No.	72,652	69,047	12,620	28,620	17,698	11,067	2,244	213,948
Centres ..	..	62	69	13	(a) 28	5	18	..	195

(a) District Trained Nursing Society.

(b) Year ended 30th June.

The number of attendances at the Baby Health Centres has increased very considerably in recent years. The following are the figures for the years 1931 to 1935:—1931, 1,150,619; 1932, 1,200,380; 1933, 1,232,887; 1934, 1,178,957; and 1935, 1,355,306.

CHAPTER X.

DEFENCE.

§ 1. Military Defence.

1. *State Systems.*—A detailed historical account of the Australian defence forces prior to Federation will be found in Official Year Book No. 2, pp. 1075–1080. *See also* Official Year Book No. 12, p. 999.

The strength of the military forces of the States on the 31st December, 1900 (the eve of Federation) was :—New South Wales, 9,338 ; Victoria, 6,335 ; Queensland, 4,028 ; South Australia, 2,932 ; Western Australia, 2,696 ; Tasmania, 2,024 ; total for Australia, 27,353. This total was exclusive of cadets, reservists and rifle club members.

2. *Commonwealth System.*—(i) *General.* Under the terms of the Constitution Act 1900, the Commonwealth took over control of defence matters in March, 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in six phases, viz. :—

- (a) The first phase, i.e., the welding together of the military forces of the States into one homogeneous army, was entrusted by the Government in 1902 to Major-General Sir Edward Hutton, K.C.B., K.C.M.G., and a sound foundation was laid, upon which the subsequent organization and training were based.
- (b) The second phase was the introduction of Universal Training in 1911. During the year 1909 a measure providing for universal training was enacted, and the scheme came into force in 1911 after the advice and recommendations of Lord Kitchener had been obtained. By the Defence Acts of 1903 and 1904 all male inhabitants between the ages of 18 and 60 years were made liable to serve in Australia with the defence forces in *time of war*. Subsequent legislation made training and service compulsory up to the age of 26 years in *time of peace*. By the Act of 1909 the principle of universal liability to training was made law for the first time in any English-speaking community. More detailed reference to these matters will be found in Official Year Book No. 12, p. 999 *et seq.*
- (c) The third phase, Divisional Organization, came into operation from the 1st May, 1921. Under this system a war organization, evolved from the Australian Imperial Force, was applied to peace conditions, with a minimum of permanent personnel. Numbers of units and formations were altered to correspond with those of the A.I.F. and every effort was made to maintain the traditions established by those units in the Great War.
- (d) The fourth phase, which was initiated by the Government in 1922, entailed the reduction of the Divisional Organization to a nucleus force.
- (e) The fifth phase, the suspension of all compulsory obligations in *time of peace* (under Part XII. of the Defence Act) and the reconstitution of the forces on a basis of voluntary enlistment, was brought into operation as from 1st November, 1929. The Divisional Organization was retained, but the peace nucleus was reduced from 48,000 Citizen Forces and 16,000

Senior Cadets to 35,000 Militia Forces and 7,000 Senior Cadets, by reductions in the training establishments of units and by ceasing to maintain certain light horse regiments and infantry battalions. The peace nucleus of the Militia Forces was further reduced to 30,000 in 1931.

- (f) The sixth phase was initiated by the Government in July, 1936, whereby authority was given to raise the training strength of the Militia to 35,000, maintaining the Senior Cadets at 7,000. This strength was attained by December, 1936. The Divisional organization was retained.

Certain light horse regiments and infantry battalions which ceased to be maintained in the fifth phase, and were linked with other light horse regiments and battalions, were now resuscitated.

In addition certain new units were organized as a first step towards the modernization of the field army and coast defences. These units included light horse machine gun regiments and anti-aircraft and search-light units.

(ii) *Military Population.* The following particulars showing the numbers of males of military age in the population of Australia, as at the Census of the 30th June, 1933, are of interest. The total number at cadet age, between 12 and 18 years, was 371,000; at citizen soldier age, between 18 and 20 years, 482,000; and between 20 and 35 years, 472,000; making a total of 954,000 between the ages of 18 and 35, which is considered the best period for military service. It is estimated that 620,000 of the males between the ages of 18 and 35 were unmarried or widowers without children, and 334,000 were married or widowers with children. In addition to the abovementioned, there were 972,000 males between the ages of 35 and 60 in Australia at the 1933 Census.

(iii) *Allotment of Units.* The organization is territorial, and the divisions are based upon infantry units. There are 50 battalions, forming 14 brigades. The areas have approximately equal numbers of males of citizen soldier age, and each furnishes a battalion of infantry, and a proportion of other troops.

ALLOTMENTS OF UNITS TO AREAS, 31st DECEMBER, 1936.

Battalion Areas.													
Providing the undermentioned Units—													
State.	Military District.	Number of Infantry Brigade Areas.	Infantry Battalions.	Light Horse Regiments.	Light Horse Machine Gun Regiments.	Armoured Car Regiment.	Royal Australian Artillery (Militia).						
							Field Artillery Batteries.	Medium Artillery.	Heavy Artillery.	Artillery Survey.	Anti-aircraft Battery.		
							Brigade Headquarters.	Batteries.	Brigade Headquarters.	Batteries.			
New South Wales	2nd	5	17	4	2	..	18	1	3	1	4	1	1
Victoria	3rd	5	17	4	2	..	17	1	3	1	4	1	1
Queensland	1st	2	7	3	..	..	6	..	..	..	2	..	..
South Australia	4th	1	3	2	1	..	4	..	..	..	1	..	..
Western Australia	5th	1	4	1	..	..	3	..	..	..	2	..	..
Tasmania	6th	..	2	1	..	..	2	..	..	1	..	..	..
Total	..	14	50	15	3	1	50	2	6	2	12	2	1

ALLOTMENTS OF UNITS TO AREAS, 31st DECEMBER, 1936—*continued.*

Battalion Areas.														
Providing the undermentioned Units—														
State.	Military District.	Royal Australian Engineers (Militia).		Signals.	Tank Corps.	A.A.S.C.				A.A.M.C.				A.A.V.C. Sections.
		Companies.	Troops.			Supply Companies.	Mechanical Transport Companies.	Supply Sections.	Mechanical Transport Sections.	Field Ambulance.	Field Hygiene Sections.	Casualty Clearing Stations.	Garrison Companies.	A.A.O.C. Companies.
New South Wales	2nd	5	3	2	26	5	1	3	3	7	3	1	1	4
Victoria	3rd	5	3	1	23	5	..	3	3	7	3	1	1	4
Queensland	1st	..	..	2	7	1	..	1	1	3	1	..	2	1
South Australia	4th	1	1	..	3	1	..	1	1	2	1	..	1	1
Western Australia	5th	1	..	1	2	..	..	..	1	1	1	..	1	..
Tasmania	6th	1	..	1	2	..	..	..	1	1	1	..	1	..
Total	..	15	8	7	66	12	1	8	2	21	10	2	7	10

(iv) *Strength of Military Forces.* (a) *Districts.* There was little alteration in the numbers serving in the Australian military forces from the institution of the Commonwealth to the year of the introduction of the compulsory training system. From 1913 to 1918, however, the annual increase was considerable. As a result of the International Conference which met at Washington on the 11th November, 1921, it was decided to continue the universal training law, but its operation was restricted to the more populous centres and to certain quotas only. From 1st July, 1922, to 30th June, 1925, training in the Senior Cadets was limited to two quotas instead of four, and in the Citizen Forces to two quotas instead of seven. On 1st July, 1925, Senior Cadet training was reduced to one quota only, while Citizen Force training was increased to three quotas. These conditions remained in force until 1st November, 1929, when the constitution of the forces on a voluntary basis was adopted. During the period last mentioned, Senior Cadet training commenced on 1st July of the year in which Senior Cadets reached the age of 17 years, and on 1st July of the following year they were allotted to the Citizen Forces, in which training continued until the 30th June of the year in which they attained the age of 21 years. Notwithstanding the reduction in training, all males residing within 5 miles of a training centre were required to register during the months of January or February of the year in which they reached the age of 14 years. Junior Cadet training of boys of the ages of 12 and 13 years, which was in abeyance during the years 1922-23 and 1923-24, was also supervised by the Defence Department during the period 1st July, 1925, to 31st October, 1929.

Under the voluntary enlistment system now in force men from 18 to 40 years of age may be enlisted. The first period of enlistment is for three years, and on its completion, the member concerned may be re-engaged for successive periods of one year until he reaches the age for retirement (48 years). The normal period of training is 12 days per annum (including 6 days in camp of continuous training).

The Senior Cadet Corps, in which enrolment is voluntary, is organized on the following basis:—(a) Detachments affiliated with Militia Units:—Light Horse, Nil; Infantry, Signals and A.S.C., 25 per cent. of the establishment of the Militia Unit; Other Arms, 20 per cent. of the establishment of the Militia Unit; and (b) Detachments consisting of pupils attending approved educational establishments. The ages for enrolment in the regimental detachments are 16 and 17 years, and in the school detachments over 14 years.

TRAINING STRENGTH OF MILITARY FORCES.

(a) District.	1901. (b) 1/1/01.	1913. 30/6/13.	1922. 31/12/22.	1933. 31/3/33.	1934. 31/3/34.	1935. 31/12/35.	1936. 31/12/36.
Army Head-Qrs. (Melbourne) ..	..	(c) 277	(c) 499	(d) 69	(d) 71	(d) 86	(d) 105
1st (Q'ld.) ..	4,310	4,625	4,319	3,289	3,506	3,178	4,281
2nd (N.S.W.) ..	9,772	12,105	14,561	10,122	10,881	10,297	13,018
3rd (Vict.) ..	7,011	10,840	11,117	9,262	9,911	9,641	11,748
4th (S. Aus.) ..	2,956	3,228	3,452	2,290	2,261	2,202	2,720
5th (W. Aus.) ..	2,283	1,685	2,018	1,656	1,739	1,400	2,612
6th (Tas.) ..	2,554	1,777	1,190	1,275	1,305	1,276	1,579
Total ..	28,886	34,537	37,156	27,963	29,674	28,080	36,063

(a) Approximately coterminous with boundaries of States. (b) Date of taking over the military forces from States by Commonwealth. (c) Including cadets at Royal Military College of Australia and Staff Corps Officers abroad, unallotted, or training with other Commonwealth Departments. (d) Including cadets at Royal Military College of Australia.

(b) *Various Arms.* The numbers of the different arms of the service on the 31st December, 1936, were as follows:—

ARMS OF THE AUSTRALIAN MILITARY FORCES, ACTIVE LIST,
31st DECEMBER, 1936.(a)

Head-quarters Staffs ..	..	143	Royal Australian Engineers ..	249
Staff Corps ..	..	241	Survey Corps ..	25
Corps of Staff Cadets ..	..	45	Field Engineers ..	1,314
Instructional Corps ..	..	517	Fortress Engineers ..	385
Light Horse ..	..	4,136	Signals ..	1,373
Light Horse (Machine Gun) Regiments ..	..	901	Infantry ..	15,914
Armoured Car Regiment ..	..	166	Tank Corps ..	47
Royal Australian Artillery ..	..	647	Army Service Corps ..	1,672
Field Artillery ..	..	4,520	Army Medical Corps ..	1,378
Medium Artillery ..	..	456	Army Ordnance Corps (b) ..	343
Heavy Artillery ..	..	954	Army Veterinary Corps ..	201
Anti-Aircraft Artillery ..	..	256	Provost Staff ..	12
Artillery Survey ..	..	168	Total ..	36,063

(a) Excluding civilian staff.

(b) Includes Ordnance Officers and Artificers.

(c) *Classification of Land Forces.* The following table shows the strength of the land forces in each State, classified according to nature of service, on the 31st December, 1936.

DISTRIBUTION OF LAND FORCES,(a) ACTIVE AND RESERVE LISTS,
31st DECEMBER, 1936.

Branch of Service.	Army Head-quarters.	1st Military District. (Qld.)	2nd Military District. (N.S.W.)	3rd Military District. (Vic.)	4th Military District. (S. Aus.)	5th Military District. (W. Aus.)	6th Military District. (Tas.)	Total.
Permanent Forces ..	(b) 99	220	787	598	97	159	72	3,032
Militia Forces ..	6	1,061	12,231	11,150	2,623	2,453	1,507	34,031
Engineer and Railway Staff Corps ..	2	9	12	12	10	9	5	50
Unattached List of Officers ..	6	31	67	64	12	5	9	194
Reserve of Officers ..	1	775	1,884	1,720	460	380	170	5,390
Chaplains ..	3	39	61	63	23	21	13	223
Total ..	117	5,135	15,042	13,607	3,225	3,027	1,776	41,929

(a) Excluding civilian staff.

(b) Including cadets at Royal Military College of Australia.

(d) *Militia Forces and Senior Cadets, by Formations.* The following table shows the strength of Militia Forces and Senior Cadets, by formations, at the 31st December, 1936:—

**STRENGTH OF MILITIA FORCES AND SENIOR CADETS, BY FORMATIONS,
31st DECEMBER, 1936.**

State.	Military Formation.	Militia Forces.	Senior Cadets.	
			Regimental Detachments.	Educational Establishments.
Victoria ..	Army Head-quarters ..	6	..	..
Queensland ..	Field Troops, 1st Military District ..	3,852	516	553
Queensland ..	1st District Base ..	209	21	..
New South Wales ..	1st Cavalry Division ..	2,293	49	..
New South Wales ..	1st Division ..	4,331	449	731
New South Wales ..	2nd Division ..	4,071	755	485
New South Wales ..	2nd District Base ..	936	129	..
Victoria ..	2nd Cavalry Division ..	2,034	110	..
Victoria ..	3rd Division ..	4,414	863	898
Victoria ..	4th Division ..	4,174	557	426
Victoria ..	3rd District Base ..	528	73	..
South Australia ..	Field Troops, 4th Military District ..	2,517	320	293
South Australia ..	4th District Base ..	106	13	..
Western Australia ..	Field Troops, 5th Military District ..	2,233	303	214
Western Australia ..	5th District Base ..	220	33	..
Tasmania ..	Field Troops, 6th Military District ..	1,389	222	100
Tasmania ..	6th District Base ..	118	18	..
Total		34,031	4,431	3,700

(e) *Numbers who served under Compulsory Provisions.* In earlier issues of the Year Book (see No. 22, pp. 578–579) tables were published showing the numbers registered and training under the compulsory system, distinguishing Citizen Forces and Senior Cadets.

(v) *Administration and Instruction.* The staff provided for the administration and training of the various arms consists of 241 officers (Staff Corps), 50 quartermasters, and 467 warrant and non-commissioned officers (Australian Instructional Corps).

(vi) *Royal Military College.* This College was established in 1911 at Duntroon in the Federal Capital Territory for the purpose of providing trained officers for the permanent forces. In January, 1931, the College was transferred to Victoria Barracks, Sydney, but it returned to Duntroon early in 1937. Admission is by open competitive examination. On the 31st December, 1936, the Australian cadets in training numbered 45, 14 of whom were admitted in 1936. In addition, 16 are being trained for the New Zealand Permanent Forces under an arrangement made in 1933 with the Government of that Dominion. Further particulars respecting the College are given on page 915 of Official Year Book No. 15.

(vii) *Railways and Defence.* A War Railway Council, consisting of military and railways officers, was instituted in 1911. Its chief duties are to furnish advice and information regarding railway transport for military purposes, and to secure co-operation between the Defence Department and the Railway Departments in regard to concentration and mobilization of troops. To prevent delay in the transport of troops, particularly

that caused by the transshipment of baggage and implements of war, the Council has recommended the adoption of a uniform railway gauge on lines linking up the State capitals. An Engineer and Railway Staff Corps has been instituted, and numbered 59 officers on 31st December, 1936. Further details will be found in Official Year Book No. 6, pp. 1070-1.

(viii) *Rifle Clubs*. On the 30th June, 1936, there were in the Commonwealth 1,175 rifle clubs with a membership of 49,183, and 91 miniature rifle clubs having a membership of 2,814. Members of rifle clubs must fire an annual course of musketry, but do not undergo any systematic drill.

For the purposes of administration rifle club activities were placed under the control of the Military Board on the 1st March, 1931. Government Grants are made for the construction and maintenance of rifle ranges, etc., and 100 rounds of ammunition are issued free to each efficient member annually.

§ 2. Naval Defence.

1. *State Systems*.—Information regarding naval defence systems prior to 1901 will be found in Official Year Book No. 2, pp. 1084-1085.

2. *The Present System*.—(i) *General*. An outline of the development of Australian naval policy was given in Official Year Book No. 3, pp. 1060-61, and No. 12, p. 1012. Some account of the building of the Australian Fleet, the proposed and modified cost thereof, the compact with the Imperial Government, etc., appears in Official Year Book No. 15, pp. 921 *et seq.* At the end of 1933, arrangements were made between His Majesty's Governments in Great Britain and Australia for a Flotilla Leader (*Stuart*), and 4 Destroyers (*Vampire*, *Vendetta*, *Voyager* and *Waterhen*) to be lent from the Royal Navy to the Royal Australian Navy. These vessels arrived at Sydney in December, 1933.

H.M.A.S. *Brisbane*, which became over-age in 1932, has been replaced by a ship of the *Leander* type. The new vessel—H.M.A.S. *Sydney*—7,000 tons and eight 6-in. guns, was commissioned in England on 24th September, 1935, and has now joined the Australian Squadron.

The mine sweepers H.M.A.S. *Yarra* and H.M.A.S. *Swan* built at Cockatoo Island were commissioned on 21st January, 1936, and 21st January, 1937, respectively.

The five "S" Class destroyers which were over age have been prepared for disposal.

To ensure closer co-operation with the Royal Navy, arrangements have been made with the Admiralty for the periodical exchange of a cruiser, thus giving an opportunity for officers and men of the Royal Australian Navy to gain experience in fleet exercises on a large scale.

(ii) *Naval College*. A naval college was established at Geelong in 1913, and was transferred in 1915 to Captain's Point, Jervis Bay, Federal Capital Territory, and thence in 1930 to the Flinders Naval Depot, Victoria. The course is similar to that carried out in naval colleges in England. In February, 1937, there were 50 cadet midshipmen under training. A boy who reaches the age of thirteen years during the calendar year in which the entrance examination is held is eligible to compete, provided he is the son of natural-born or naturalized British subjects. From amongst those qualified the selection committee chooses the number required. The Commonwealth Government bears the whole expense of uniforms, victualling, travelling, as well as that of the educational course. Altogether 175 officers who have passed through the college are now serving with the Fleet.

(iii) *Training Establishments*. Recruits from 16½ to 21 years of age receive their preliminary training at Flinders Naval Depot, Victoria, where, in addition to the entry school, instruction is given in Gunnery and Torpedo. Signals and Wireless Telegraphy, Engineering, etc.

(iv) *The Naval Station.* A description of the limits of the Australia Naval Station is contained in earlier issues of the Official Year Book (see No. 18, pp. 608-9).

(v) *Vessels.* A list of the vessels of the Royal Australian Navy is given hereunder :—

SHIPS OF THE ROYAL AUSTRALIAN NAVY, MARCH, 1937.

Vessel.	Description.	Displacement.	Power.
		Tons.	H.P.
IN COMMISSION—			
<i>Australia</i>	Cruiser	9,870	80,000
<i>Canberra</i>	"	9,850	80,000
<i>Sydney</i>	"	7,000	72,000
<i>Stuart</i>	Flotilla Leader	1,530	40,000
<i>Vendetta</i>	Destroyer	1,090	27,000
<i>Waterhen</i>	"	1,100	27,000
<i>Cerberus</i>	Motor Boat (Flinders Naval Depot)	61	220
<i>Moresby</i>	Sloop	1,650	2,500
<i>Penguin</i> (late <i>Platypus</i>)	Depot Ship, Sydney	3,455	3,500
<i>Swan</i>	Minesweeper	1,000	2,000
<i>Yarra</i>	"	1,060	2,000
IN RESERVE—			
<i>Adelaide</i>	Cruiser	5,100	25,000
<i>Albatross</i>	Seaplane Carrier	5,000	12,000
<i>Vampire</i>	Destroyer	1,090	27,000
<i>Voyager</i>	"	1,100	27,000
FLEET AUXILIARY—			
<i>Kurumba</i>	Fleet Oiler	7,930	2,000

(vi) *Floating Dock.* In 1926 the Commonwealth Government entered into an agreement with the New South Wales Government whereby the latter, in consideration of the payment of a subsidy of £135,000, constructed at Walsh Island, Newcastle, a floating dock capable of lifting 15,000 tons.

(vii) *Naval Forces.* Besides the sea-going forces, there is a R.A.N. Reserve, which is composed of Citizen Naval Forces. The personnel of the sea-going forces, which was originally largely composed of Imperial officers and men, is now 99.6 per cent. Australian. The strength of the naval forces is given hereunder :—

STRENGTH OF NAVAL FORCES (PERMANENT AND RESERVES), 28th FEBRUARY, 1937.

Description of Force.	Numbers Borne.		
	In Training.	Officers.	Men.
Royal Australian Navy (Sea-going)	371	3,880
Royal Australian Naval Auxiliary Services	34	151
Cadet Midshipmen undergoing training at R.A.N. College	50	..	..
Royal Australian Naval Reserve (Sea-going)	56	..
Royal Australian Fleet Reserve	365
Royal Australian Naval Reserve	198	3,267
Royal Australian Naval Volunteer Reserve	86	78

§ 3. Air Defence.

1. **General.**—A statement in regard to the preliminary steps taken in connexion with the development of air defence will be found in Official Year Book No. 18, p. 610.

The Royal Australian Air Force is administered by a Board consisting of three Air Force members and a Finance member. To this Force is entrusted the air defence of Australia, and the training of personnel for co-operation with the naval and military forces. The present establishment of the Force includes the following units:—(a) Headquarters Royal Australian Air Force, with representation in London; (b) a Flying Training School; (c) two Aircraft Depots; (d) seven service landplane squadrons and one service amphibian squadron.

2. **Establishment.**—The present approved establishment of the Permanent Air Force is 227 officers and 1,833 airmen, and of the Citizen Air Force, 52 officers and 340 airmen. Four aerodromes are under the control of the Air Board; all other aerodromes and air routes have been taken over by the Controller of Civil Aviation.

3. **Air Routes.**—Aerodromes and emergency landing grounds have been prepared between the capital cities and on certain parts of the coast for service and civil purposes. At the 30th April, 1937, 242 Government aerodromes and emergency landing grounds had been prepared and 202 licensed public aerodromes were also available for use.

4. **Civil Aviation.**—Details regarding the formation and activities of the Civil Aviation Department will be found in Chapter V., Section D. Aviation.

§ 4. Expenditure on Defence.

The following table shows the expenditure on defence in 1901-2 and during each of the last five years. The figures are exclusive of war services and of interest and exchange on loans. Details of the expenditure of the Defence Department and the cost of the war, repatriation and war services are given in Chapter XXVII.—Public Finance.

DEFENCE EXPENDITURE (EXCLUDING WAR SERVICES).—AUSTRALIA.

Item.	1901-2.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37. (a)
	£	£	£	£	£	£
Central Administration	5,594	21,925	20,307	21,663	21,891	30,502
Naval	178,819	1,495,948	1,646,430	1,998,363	2,371,187	2,531,341
Military	732,626	978,144	1,236,716	1,328,504	1,810,751	2,237,513
Air Services—						
R.A. Air Force .. ..	..	319,974	409,413	535,038	783,498	1,009,851
Civil Aviation .. ..	..	137,271	133,517	164,439	185,644	487,448
Munitions Supply Branch ..	..	180,341	321,162	415,959	451,093	500,305
Rifle Clubs and Associations ..	41,653	26,515	31,662	34,781	39,796	55,004
Principal Supply Officers Committee .. ..	..	..	..	..	..	5,350
Special Appropriations—						
Naval Construction .. ..	..	2,865	Cr. 9,341	513,124	663,852	607,123
Reconditioning Equipment and Purchase of Aircraft Equipment .. ..	..	Cr. 4,971	365,695	81	1,427	..
Arms, Armament, Aircraft, Munitions, Equipment and Reserves .. ..	..	..	..	364,627	552,406	737,798
Defence Works, Buildings and Sites .. ..	..	..	..	79,324	132,767	615,000
Development of Civil Aviation ..	..	1,948	1,933	997	120	12,261
	958,692	3,159,960	4,157,494	5,457,800	7,014,432	8,829,655

(a) Estimated.

In addition to the above, £40,234 was expended from Revenue on war services directly under the control of the Defence Department in 1935-36 and the estimated expenditure in 1936-37 was £11,460.

The total cost of war services including interest, sinking fund, war pensions, repatriation, etc., will be found in Chapter XXVII., Part B § 5—Cost of War and Repatriation.

§ 5. Munitions Supply.

1. *General*.—A statement dealing with the powers and functions of the Munitions Supply Board is given on p. 612 of Official Year Book No. 18.

2. *Factories*.—(i) *General*. The Explosives Factories at Maribyrnong, Victoria, which manufacture cordite and high explosives for cartridges and artillery ammunition, aeroplane dopes, nitro-benzine, and special paints, were established in 1911. The staff at 30th June, 1936, numbered 349.

The Acetate of Lime Factory, established at Bulimba, Brisbane, in September, 1918, has now been abandoned.

The Clothing Factory at Melbourne, Victoria, which had a staff of 358 employees on 30th June, 1936, commenced output in July, 1912, and since that date has been able to supply the whole of the uniform clothing and head gear required for the Defence forces and the Postmaster-General's Department. It also supplies clothing required by State Departments and local public bodies.

The Small Arms Factory at Lithgow, New South Wales, which was opened on 1st June, 1912, and delivered the first instalment of Australian arms in May, 1913, had on its pay roll on 30th June, 1936, 283 employees. Rifles and machine guns for land and air services are being produced, and provision has been made for the manufacture of pistols.

On the 1st January, 1927, the Defence Department entered into possession by purchase of the works of the Colonial Ammunition Company Limited at Footscray, Victoria. As from the 1st July, 1928, this establishment, known as the Small Arms Ammunition Factory, was amalgamated with the Gun Ammunition Factory, and this group is now known as the Ammunition Factories, where in addition to rifle and pistol ammunition, big gun fuses, detonators, cartridge cases and aircraft bombs are also produced. Brass and other non-ferrous metals required for munitions manufacture are rolled at this factory. The staff at 30th June, 1936, numbered 707.

At the Ordnance Factory, Maribyrnong, Victoria, established in 1924, provision is made for the production of guns, shells, gun carriages and military vehicles. This group includes a well equipped forge and woodworking and electrical shops. The number of employees at 30th June, 1936, was 657.

(ii) *Investment in Factories*. Up to 30th June, 1936, the capital invested in the factories now in operation was approximately as follows:—Small Arms Factory, £844,013; Explosives Factories, £213,345; Clothing Factory, £82,267; Ammunition Factories, £697,747; and Ordnance Factories, £82,354.

3. *Research Laboratory*.—At Maribyrnong, Victoria, a Research Laboratory has been established consisting of five main sections, i.e., general chemistry, explosives and ammunition, timber, metallurgy and physics (including optics, metrology and electrical). Plant, buildings, fittings and furniture were valued at £128,249 on 30th June, 1936, and the staff at the same date numbered 68.

§ 6. Remount Depot.

Information in regard to the establishment of this branch of activity is contained in earlier issues of the Official Year Book (*see* No. 18, p. 613). When war was declared in 1914 little difficulty was experienced by the Remount Service in coping with the enormous task of obtaining and training horses for the mounted units of the A.I.F. and in providing for the shipment of horses to Egypt and India as required.

§ 7. Australian Contingents.

1. *General*.—In earlier issues of the Year Book an account was given of the composition, etc., of the Australian contingents dispatched for service in the New Zealand and Sudan Campaigns, in South Africa, China, and the Great War of 1914–18 (*see* Official Year Book No. 12, pp. 1019 *et seq.*).

2. *Australian Troops (Great War)*.—Particulars of the enlistments, casualties, honours and decorations won, and engagements of the Australian Imperial Force during the Great War were given in Official Year Book No. 16, pp. 628 *et seq.*

§ 8. War Gratuity.

Reference was made in earlier Year Books (*see* No. 15, p. 930) to the bonus payable in accordance with the War Gratuity Acts of 1920 as a war service gratuity to soldiers and sailors who served in the Great War. Owing to limitations of space this information cannot be repeated, but it may be noted that the gratuity was paid in Treasury Bonds, maturing not later than 31st May, 1924, and bearing interest at 5½ per cent. In necessitous cases payment was made in cash when desired by the person entitled. The first gratuities were made available about the beginning of June, 1920. The total amount paid to 30th June, 1930, was £27,509,217, and bonds amounting to £14,089 had not been redeemed.

§ 9. Special Defence Legislation.

Information regarding special defence legislation enacted by the Commonwealth Government during the War was given in Official Year Book No. 15, p. 930. It may be pointed out here that the War Precautions Act Repeal Act of 1920 repealed the Act 1914-1918, but a limited number of matters dealt with under the original Act were provided for under the War Precautions Act Repeal Act of 1920-1928 or by regulations made thereunder.

CHAPTER XI.

REPATRIATION.

§ 1. General.

An outline of the activities leading up to the formation of the Commonwealth Department of Repatriation was given in Official Year Book No. 15, p. 931, but limits of space preclude its repetition in the present volume. Some account was given also in the Year Book referred to, and in subsequent issues, of the policy and activities of the Department generally, while detailed information was incorporated in regard to such matters as sustenance rates and pensions to soldiers and dependants. (See Official Year Book No. 17, pp. 598 to 601). During the year ended 30th June, 1928, sustenance rates were amended to bring them into line with war pensions rates, and the scale of rates in respect to war pensions was amplified by providing for an allowance to the third or subsequent child at such a rate as will provide, together with pension in respect of that child, a sum of 15s. per fortnight. In 1931 it was prescribed that the payment of sustenance would be made only where the necessities of medical treatment prevented the soldier from following his usual occupation, while Financial Emergency legislation passed in the same year enacted that sustenance would be payable only where actually needed. Income from all sources was to be taken into account in computing sustenance, but this provision was disregarded in August, 1934. During 1935, the Government decided to provide from 1st January, 1936, free medical treatment for all ex-soldiers suffering from pulmonary tuberculosis, irrespective of whether such condition was attributable to war service.

The main activities of the Repatriation Commission at 30th June, 1936, were confined to the grant, review and assessment of war and service pensions, the provision of medical treatment, the renewal and repair of artificial replacements and surgical appliances, the grant and review of sustenance and living allowances, and the administration of the Soldier's Children Education Scheme.

§ 2. War Pensions.

1. *General.*—Provision for the payment of war pensions to soldiers and their dependants was made by the Commonwealth Parliament in the War Pensions Act 1914 which came into operation on 21st December, 1914. The maximum pension for a private was fixed at £52 per annum with higher rates for higher ranks. The definition of dependants under the original Act was broadened by a measure passed in 1915, while both these Acts were consolidated by the War Pensions Act 1914–1916, which increased the maximum pension to a private to £3 per fortnight (£78 per annum) with higher rates for higher ranks. Scale rates of pension were definitely laid down for specific disabilities such as in cases of amputation of limbs, etc.

In 1920 the passage of the Australian Soldiers Repatriation Act repealed the existing legislation and provided, from the 1st July, 1920, a flat rate of £4 4s. per fortnight for a 100 per cent. pension for all ranks up to and including that of Lieutenant. The rates for ranks higher than that of Lieutenant were not increased. The main additional increases were:—

- (a) a pension up to £4 4s. per fortnight to widows with dependent children, or, if without dependent children, where circumstances warrant the increased amount; (the invariable practice is to grant the full £4 4s. per fortnight to widows with dependent children)

- (b) a Special Rate pension of £8 per fortnight to blinded and to totally and permanently incapacitated soldiers; and
- (c) a Special Rate pension, not exceeding £8 per fortnight to tubercular soldiers, subject to certain conditions.

Payment of pension to the full degree of a man's disability in cases where a pre-war disability has been aggravated "to any material degree" by war service was contained in an amending Act of 1921. Hitherto a pension was payable only with respect to the degree of disability actually caused by war service.

A further amendment of the Australian Soldiers Repatriation Act in 1922 made provision for certain "amounts" and "allowances" to limbless soldiers, in addition to existing rates of war pensions, ranging from 7s. to 70s. per fortnight. In certain double amputation cases, an allowance for an attendant was provided at 40s. or 80s. per fortnight, according to the nature of the case. An attendant's allowance was also payable to "spinal cases" at £2 per fortnight. A special rate pension of £8 per fortnight was provided to those soldiers who, although not totally blind, had no useful vision.

During 1925 the Government decided that a permanent pension of not less than £4 4s. per fortnight should be paid to all "members" proved to be suffering from pulmonary tuberculosis on or subsequent to 1st July, 1925, as the result of war service, or as the result of a pre-existing condition having been materially aggravated by war service. On 30th September, 1925, a new Regulation was gazetted, operative from 1st July, 1925, providing for the grant of an allowance, in addition to pension, not exceeding 15s. per fortnight to a soldier in receipt of pension under the Fourth Schedule to the Act with respect to loss of vision in one eye. Both these provisions were made statutory by incorporation in the Amending Act of 1934.

The general reduction of expenditure provided by the Financial Emergency Act 1931 applied also to war pensions. No reduction, however, was made in the rate of pension payment to incapacitated soldiers. The widows and children of soldiers whose death was due to war service and the widowed mothers (who became widows either prior to, or within three years after, the death of the sons) of any deceased unmarried member of the Forces were also exempted from reductions, the necessary economies being effected in payments to other classes of war pensioners. The maximum rate of pension payable on behalf of the child of an incapacitated soldier was reduced to 12s. per fortnight, and a wife married or a child born to an incapacitated member of the Forces subsequent to 1st October, 1931, were excluded from pension benefits. Considerable modifications of the reductions were included in the Financial Relief Acts of 1933 and 1934, and some classes of pension were fully restored.

During 1934 the Second Schedule to the Act was amended to include the Attendants' Allowances previously payable under regulation to blinded soldiers and to provide for eligibility for such allowances in consequence of injury or disease affecting the cerebro-spinal system or disease causing incapacity similar in effect thereto. A further amendment provided that a wife married, or a child born, to a member of the Forces after 1st October, 1931, shall be deemed to be dependants and eligible for pension benefits if the member has died or dies from the results of war service. Certain anomalies concerning the continuance or regranting of pension were removed.

In December, 1935, the Principal Act was again amended. The principal amendments were in relation to (a) reinstatement of pensions previously commuted; (b) grant of pensions to dependants of deceased members of the Forces (whatever the actual cause of death) in cases where at the date of the member's death he was in receipt of a pension under the Second Schedule to the Act or in receipt of pension as a double

amputee; (c) removal of the time limit on lodgment of claims under Section 23 (2) of the Act; and (d) to provide relief by way of service pensions to aged members of the Forces; to those members, and their families, who are unable through mental or physical defects to engage in remunerative employment and are declared permanently unemployable; and to those members, and their families, who are suffering from pulmonary tuberculosis. The new provisions operated from 1st January, 1936. Financial Relief legislation, which became operative as from 1st October, 1936, increased the maximum rate of pension payable to the child of an incapacitated soldier from 12s. to 15s. per fortnight. The maximum amount of service pension payable was also increased from 36s. to 38s. per fortnight.

The Principal Act was further amended in December, 1936, and is now known as the Australian Soldiers' Repatriation Act 1920-1936. A female member of the Forces who is an applicant for service pension on account of age or permanent unemployability is now eligible for consideration if she embarked for service abroad. Previously she must have served in a theatre of war to be eligible. A further amendment provided that an institutional rate of service pension not exceeding 12s. per fortnight be made available. This benefited inmates of mental asylums particularly, because previously they were debarred from service pensions. Additional amendments provided for posthumous grants of service pensions in certain cases and for the simplification of administrative procedure.

2. **Appeal Tribunals.**—The principal Act was amended as from 1st June, 1929, whereby tribunals were created to hear appeals in regard to war pensions. The War Pensions Entitlement Appeal Tribunal is empowered to hear and decide any appeal by or on behalf of ex-members of the forces or their dependants, against a decision of the Repatriation Commission that an incapacity or the death of an ex-member did not arise out of war service. Two Assessment Appeal Tribunals were created, to hear and decide any appeal against a current assessment or a "Nil" assessment of war pension made by the Repatriation Commission in respect of an incapacity of an ex-member of the forces which had been accepted as arising out of war service.

3. **War Pensions in Force.**—At the 30th June, 1936, the number of war pensions was 260,135 with an annual liability of £7,444,901. The outstanding figures for 1935-36 were as follows:—

New claims granted during year	..	..	..	..	5,510
Claims rejected (gross) during year	..	..	..	..	10,200
Pensions reviewed during year	..	..	..	..	47,593
Pensions cancelled or discontinued during year	..	..	..	..	9,879
Pensioners died during year	..	..	..	..	2,665
Number of pensions in force at 30th June, 1936	..	..	..	..	260,135
Annual pension liability on the 30th June, 1936	..	..	..	..	£7,444,901

At the 30th June, 1936, special rate pensions of £8 per fortnight were being paid to—

Blinded soldiers	..	..	..	..	..	141
Tubercular soldiers	..	..	..	..	..	922
Totally and permanently incapacitated soldiers	..	..	..	..	..	1,936

An analysis of the total number of new grants during the year reveals the following:—

Members (i.e., ex-soldier pensioners)	..	..	..	..	837
Wives of members	..	..	..	..	1,097
Children	..	..	..	..	3,165
Other dependants	..	..	..	..	411
					<hr/> 5,510

In the following table the number receiving pensions at 30th June, 1936, is shown for each class of pensioner :—

WAR PENSIONS IN FORCE, AUSTRALIA, AT 30th JUNE, 1936.

Class.						Number of Pensioners.
Orphan children	..	..	..	..	..	5,358
War widows	..	..	..	..	..	8,987
Soldiers	..	..	..	..	..	76,337
Children	..	..	..	..	..	93,244
Wives	..	..	..	..	..	58,081
Parents	..	..	..	..	..	17,757
Brothers and sisters	..	..	..	..	..	202
Others	..	..	..	..	..	169
Total						260,135

4. Number of Pensioners and Expenditure.—The following table shows the number of pensioners at 30th June, 1936, and the places where payments were made during 1935-36 :—

WAR PENSIONS.—NUMBER OF PENSIONERS, 1936.

Where Paid.	Incapacitated Members of the Forces.	Dependants of—		Total.	Expenditure.
		Deceased Members.	Incapacitated Members.		
					£
New South Wales ..	25,644	9,419	49,239	84,302	2,592,985
Victoria ..	25,665	9,096	52,823	87,584	2,276,024
Queensland ..	8,557	2,789	16,935	28,281	825,390
South Australia ..	4,232	2,392	8,033	15,257	464,536
Western Australia ..	7,065	2,347	14,470	23,882	662,932
Tasmania ..	3,219	1,309	7,928	12,456	371,568
Total, Australia ..	74,382	27,352	150,028	251,762	7,193,435
London ..	1,645	2,524	3,276	7,445	} 326,793
South Africa ..	47	27	66	140	
New Zealand ..	242	156	341	739	
Other Overseas ..	21	3	25	49	
Total ..	76,337	30,062	153,736	260,135	7,520,228
Payments made in Australia in respect of other countries less amounts received from other countries ..	..	..	..	..	Cr. 1,693
Total, War Pensions Trust Fund Account ..	..	..	..	..	7,518,535

The subjoined table shows the numbers of pensions granted, claims rejected, and pensions in force, together with the amount paid in pensions for the years ended 30th June, 1921 and 1931 and for each of the four years ended 30th June, 1935:—

WAR PENSIONS.—SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensions Granted.	Claims Rejected.	Pensions in Force.			Total.	Amount paid in Pensions
			Incapaci- tated Members of the Forces.	Depend- ants of Incapaci- tated Members.	Depend- ants of Deceased Members.		
							£
1921 ..	25,983	3,388	79,491	93,995	49,051	222,537	7,386,842(a)
1931 ..	11,555	920	75,316	172,389	35,617	283,322	7,996,180
1933 ..	2,693	664	75,244	164,268	30,298	269,810	6,925,830
1934 ..	2,792	609	75,037	162,198	29,719	266,954	7,048,592
1935 ..	4,174	1,869	74,998	158,787	30,276	264,061	7,360,057
1936 ..	5,510	10,200	76,337	153,736	30,062	260,135	7,520,228

(a) Includes payments made from Trust Fund, War Pensions Account, on behalf of other countries less recoveries.

5. **Service Pensions.**—By legislation passed in December, 1935, the scheme of service pensions was instituted to operate from 1st January, 1936.

The maximum rate of service pension for a single man is fixed at 32s. per fortnight, and for a man and his wife at 32s. per fortnight each, with an additional 5s. per fortnight for each child up to four in number under sixteen years of age. The actual rate payable in any case is determined after taking into consideration all other income and property received or owned by the pensioner in question, and no service pension can be paid in any case where such other income and property has an assessable value, in the case of a single man, of £81 18s. per annum, or in the case of a man and wife, of £163 16s. per annum between them. In addition, no service pension can be paid when the applicant is possessed of property to the value of £400 or more.

If the income from all other sources is less than the annual amounts above shown, then service pensions become payable at such rates as will, with that other income, bring the total income of the pensioner (including service pension) up to the allowed maximum, provided, of course, that such pensions cannot exceed the maximum rates of 38s. per fortnight for a single man or 32s. each per fortnight for man and wife, as hereinbefore mentioned.

Eligibility for such service pensions may be established on three grounds:—

- (a) Sixty years of age or more, provided the applicant served in a theatre of war, but eligibility on this ground limits payment of service pension to the ex-soldier and not to his wife or children. In the case of a female member of the Forces, the qualifying age is 55 years, and service abroad, not necessarily in a theatre of war, is sufficient.
- (b) Permanently unemployable, provided the applicant served in a theatre of war (or, in the case of a female member, served abroad). Under this class pensions may be paid to the ex-soldier, his wife and children—up to four in number.
- (c) Pulmonary tuberculosis, whether the applicant served in a theatre of war or not. Under this class also pensions are payable to the wife and children—up to four in number.

Only those applicants who qualify under Class (c) are entitled to receive both service pensions and invalid pension at the same time.

The following figures give the important facts of the service pension scheme over the period 1st January, 1936, to 31st December, 1936 :—

Claims granted during the year—

Members of the Forces	..	..	..	..	4,016
Wives	..	..	..	..	1,358
Children	..	..	..	..	1,995
					<hr/> 7,369

Claims rejected during the year—

Members of the Forces	..	..	..	..	3,724
Wives	..	..	..	..	2,138
Children	..	..	..	..	3,975
					<hr/> 9,837

Pensions cancelled or discontinued during year	..	..	500
Pensioners died during year	..	..	173
Pensions in force at 31st December, 1936	..	..	6,810
Annual pension liability on 31st December, 1936	..	..	£210,831

6. *Cost of Administration.*—The cost of administration in 1935-36 was £262,294, representing 3.18 per cent. of the total cost of benefits disbursed. The administrative costs of the three War Pensions Appeal Tribunals are included in the above figure and totalled £29,082.

§ 3. Medical Treatment of Returned Soldiers Suffering from War Service Disabilities.

At 30th June, 1936, there were 1,704 in-patients and 20,426 out-patients receiving medical treatment. The expenditure to this date was £7,528,947.

§ 4. Miscellaneous.

1. *Summary of Other Departmental Activities.*—The following is a summary of the work of the Department from 8th April, 1918, to 30th June, 1936 :—

(i) *Employment.* Number of applications, 275,490; number of positions filled, 133,272.

(ii) *Vocational Training.* Number of men completed training, 27,696; number in training, nil.

(iii) *Soldiers' Children Education Scheme.* From the inauguration of the scheme in February, 1921, up to 30th June, 1936, 10,597 applications for assistance had been received. Of these 10,130 had been approved, of which 11,007 recipients of the benefits had completed their training, 4,386 were undergoing training, 52 applications were pending, and the remainder had been refused or withdrawn.

Up to 30th June, 1936, the expenditure was £1,680,330.

(iv) *Assistance Granted.* The total expenditure incurred during the period from 8th April, 1918, to 30th June, 1936, was £20,777,475, of which £1,676,007 represented loan and £19,101,468 general expenditure. Of the total the largest amounts were absorbed by medical treatment, with £7½ millions, vocational training with £5 millions, and expenses of providing employment, £2½ millions.

2. **Expenditure of Department of Repatriation.**—The expenditure of the Department during the twelve months ended 30th June, 1936, was £8,505,554, distributed as follows :—

Repatriation benefits—						£
Loans to soldiers	..	..	..	..	..	2
Grants to soldiers and general expenditure (including maintenance of training schools, medical institutions, etc.)	..	..	..	..	..	536,573
Assistance to soldiers in necessitous circumstances	..	..	..	..	..	27
Allowances to dependants of soldiers not provided for under the Act	..	..	..	..	..	911
Medical treatment to Home Service personnel	..	..	..	..	..	60
						<hr/> 537,573
Soldiers' Children Education Scheme	..	..	..	..	..	86,852
War Pensions	..	..	..	..	..	7,549,671
Administrative costs—						
Salaries	..	..	..	..	..	196,655
Contingencies	..	..	..	..	..	65,639
						<hr/> 262,294
Exchange on Remittances to London and New York	..	..	..	..	..	69,164
Total						<hr/> 8,505,554

The total expenditure for the previous year was £8,252,130.

3. **Losses of Soldier Settlement.**—Reference to losses incurred in connexion with settlement of returned soldiers and sailors will be found in Chapter IV.—Land Tenure and Settlement.

CHAPTER XII.

THE TERRITORIES OF THE COMMONWEALTH.

GENERAL.

The Territories under the control of the Commonwealth are:—The Northern Territory; the Federal Capital Territory; Papua (formerly British New Guinea); Norfolk Island; the Territory of New Guinea (by Mandate of the League of Nations); Nauru (under joint Mandate of the Commonwealth, Great Britain and New Zealand); the Territory of Ashmore and Cartier Islands; and the Australian Antarctic Territory.

The results of the census of the Territories at the 30th June, 1933, may be found in the separate bulletins (see list at back of this volume).

In each of the external Territories the currency is the same as in Australia.

THE NORTHERN TERRITORY.

§ 1. Area and Population.

1. *Introductory.*—Upon the extension of New South Wales westward to the 129th meridian in 1827, the Northern Territory was incorporated in that colony, but in 1863 was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands it was transferred to the Commonwealth on 1st January, 1911. The total area is 523,620 square miles, or 335,116,800 acres.

2. *Population.*—(i) *Europeans.* At the census taken in 1881 there were only 670 Europeans in the Territory. The number increased slowly, reaching its maximum in 1918 with 3,767 persons. At the census of 1933 the white population had decreased to 3,306. This number, however, was 34.5 per cent. greater than the figure at the census of 1921.

(ii) *Non-Europeans.* The number of full-blood non-Europeans, excluding Australian aborigines, in the Northern Territory on the 30th June, 1933, was 744, of whom 452 were Chinese, the remainder being, mainly, Filipinos (69), Japanese (91), and Malays (59). There were at one time over 4,000 Chinese in the Territory.

The half-caste population recorded at the census of 1933 numbered 800 of whom 743 were half-caste Australian aborigines.

(iii) *Total Population.* The highest recorded population of all races, except aborigines, was 7,533 in 1883. The estimated population at 31st December in each of the last five years is given in the following table:—

NORTHERN TERRITORY.—POPULATION (EXCLUSIVE OF ABORIGINES).

Year.			Males.	Females.	Total.
1932	..	..	3,353	1,433	4,786
1933	..	..	3,370	1,448	4,818
1934	..	..	3,440	1,504	4,944
1935	..	..	3,482	1,609	5,091
1936	..	..	3,596	1,709	5,305

The Census population (30th June, 1933) was 3,373 males, 1,472 females, total 4,850.

(iv) *Movement of Population.* The following is a summary of movement of population in 1936 (excluding overland migration):—

NORTHERN TERRITORY.—MOVEMENT OF POPULATION, 1936.

Immigration	1,429	Emigration	1,268	Excess of immi- gration over emigration ..	161
Births	113	Deaths	60	Excess of births over deaths ..	53
<hr/>					
Increase	1,542	Decrease	1,328	Net Increase ..	214

The immigration and emigration figures for the Territory during the five years ending 1936 are shown in the following table:—

NORTHERN TERRITORY.—IMMIGRATION AND EMIGRATION.

Year.				Immigration.	Emigration.
1932 .. ..	..	..	..	479	545
1933 .. ..	..	..	..	516	497
1934 .. ..	..	..	..	680	582
1935 .. ..	..	..	..	1,014	881
1936 .. ..	..	..	..	1,429	1,268

(v) *The Aborigines.* A special article contributed by Dr. W. Ramsay-Smith on the subject of the Australian aborigines was incorporated in Year Book No. 3 (pp. 158-176). The Chapter "Population," in Year Book No. 17, contained information regarding the number and distribution of aborigines and the measures taken by the States (in the case of the Northern Territory, by the Commonwealth) to protect them and to conserve their interests. Large numbers of the aborigines in the Territory are still outside the influence of Europeans. The total number of full-blood and half-caste aborigines at 30th June, 1936, was estimated at 17,730, of whom 3,433 were in regular employment. There are fifteen aboriginal reserves, comprising an area of 67,244 square miles. (See also Chapter on Population hereinafter.)

§ 2. Legislation and Administration.

On 1st January, 1911, the Territory was transferred by South Australia to the Commonwealth. The terms were outlined in Year Book No. 15, p. 940. By the Northern Australia Act 1926, the Territory was divided into two parts, Central Australia and North Australia, separated by the 20th parallel of south latitude, each administered by a Government Resident. In addition, Advisory Councils and a Development Commission were provided for. The Act of 1926 was superseded by the Northern Territory (Administration) Act 1910-1933. By this Act the provision made for Advisory Councils was cancelled, and the Development Commission abolished. The administration of the Territory was placed in the hands of an Administrator, residing at Darwin, assisted by a Deputy Administrator, residing at Stuart (Alice Springs). The Governor-General is empowered to make ordinances having the force of law in and in relation to the Territory, subject to disallowance by either House of the Commonwealth Parliament. The Territory elects a member to the House of Representatives, who may take part in the debates, but may not vote, except on a motion for the disallowance of any ordinance of the Northern Territory or on any amendment of any such motion.

§ 3. Physiography.

1. Tropical Nature of the Country.—The Territory is within the torrid zone, with the exception of a strip $2\frac{1}{2}$ degrees wide which lies south of the Tropic of Capricorn.

2. Contour and Physical Characteristics.—The low flat coast-line seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and ironstone form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries.

The principal features of the coast line are enumerated in Year Book No. 1, p. 66; the rivers in Year Book No. 2, p. 76; the mountains in Year Book No. 3, p. 67; the lakes in Year Book No. 4, pp. 77, 78; the islands in Year Book No. 5, pp. 71, 72; and the mineral springs in Year Book No. 6, p. 65.

Inland, the country generally is destitute of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the 17th or 18th parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply of the interior systems. Towards the centre of the continent the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

§ 4. Climate, Fauna and Flora.

1. The Seasons.—There are two main climatic divisions—the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly the whole of the rainfall occurs in the summer months. Fuller particulars will be found in Year Book No. 6, p. 1116.

2. Fauna.—The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous), and frogs abound. There are many varieties of fresh-water fish and littoral mollusca. Butterflies and beetles are strongly represented. The white ant is a pest, anthills in the Territory sometimes attaining great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Native fauna are in some cases protected. Buffalo formerly existed in large herds, but, as pointed out later, their number has been greatly reduced by indiscriminate shooting.

3. Flora.—The vegetation is North Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. The timber trees are not of great commercial value, but in the coastal regions tropical vegetation grows luxuriantly to the water's edge. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being: *Euphorbiaceæ*, *Compositæ*, *Convolvulaceæ*, *Rubiaceæ*, *Goodeniaceæ*, *Leguminosæ*, *Urticæ*.

Fuller particulars regarding fauna and flora are given in Year Book No. 6, pp. 1116-7

§ 5. Production.

1. Holdings.—There were on the 30th June, 1930, 847 holdings in the Northern Territory, covering an area of 213,843 square miles. Of these, 441 were held on pastoral lease or permit, 90 on agricultural lease, the remainder being held on leases for various other purposes. Rents received amounted to £27,069.

2. Agriculture.—Up to the present agriculture has made little progress in the Territory, although it has been proved that rice, tobacco, coconuts, mangoes, bananas, cotton, various fodder plants, and peanuts can be successfully grown. Expense of

harvesting is, at present, an obstacle to the economic production of rice, and until labour-saving machinery is procured it cannot be produced with profit. There is a large stretch of first-class coconut land on the coast, but hitherto planting has not been attempted on a commercial scale. For the encouragement of primary production a Primary Producers' Board was established in 1931. Peanuts have become the principal crop. In 1934-35 the yield was 16,938 bags or 423 tons from 1,000 acres and the price averaged 4½d. per lb. in southern markets. Although the acreage was approximately the same the estimated yield for 1935-36 was only about 7,000 bags.

3. *Pastoral Industry.*—The pastoral possibilities of certain parts of the Northern Territory were recognized at an early date, and in 1866 stock was brought into the Macdonnell Range country from South Australia. Six years later cattle were moved from Queensland to the northern parts of the Territory, and in 1879 Mr. Giles reached the Katherine River with 2,000 head of cattle and 12,000 sheep from South Australia. For various reasons sheep-raising did not succeed. The cattle industry progressed and became the mainstay of the Territory, a great impetus being given to it in 1917 by the opening of extensive meat works at Darwin. Unfortunately the works closed down in 1920, and are still idle. The number of cattle exported by land from the Northern Territory during the year 1935-36 was about 75,600, and the number imported about 7,500, while approximately 10,000 head of sheep were brought into the Territory from Queensland for agistment. The cattle industry has been retarded by the ravages of ticks and by the difficulty of travelling stock through waterless country. These difficulties are, however, gradually being overcome, the former by "dipping," and the latter by adding to the number of wells on the various stock-routes and the creation of stock reserves. Buffaloes thrive in the coastal districts, but their number has been greatly reduced by indiscriminate shooting to obtain the hides.

The estimated number of live stock in the Territory in the last five years is given in the table hereunder:—

NORTHERN TERRITORY.—LIVE STOCK.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Goats.	Camels.	Donkeys.	Mules.
1931 ..	33,442	749,745	18,867	665	19,011	501	909	668
1932 ..	33,072	780,121	18,250	449	20,622	438	776	479
1933 ..	33,590	859,867	18,076	397	17,356	344	992	438
1934 ..	35,094	899,679	23,356	626	20,044	319	1,196	496
1935 ..	35,152	900,535	25,483	555	20,455	298	1,056	512

4. *Mining.*—(i) *General.* Alluvial gold-digging in the Northern Territory commenced in 1869, and up to the end of 1880 gold to the value of £79,022 had been produced. In 1881 the gold production reached its maximum, the value for that year being £111,945. During the following years it fluctuated considerably, but as long as the alluvial deposits lasted the output was satisfactory. In the transition period from alluvial to reef mining the industry declined considerably. The production of metals other than gold has suffered on account of the vagaries of prices, and the high cost of transport and of white labour. Owing to the exceptionally high price of gold the search for the precious metal has been stimulated in recent years with an increasing annual production. The principal producer of gold in 1935-36 was the Tennant Creek field which steadily progressed during the year. Approximately 90 per cent. of the total production was raised here, and with the extension of treatment plants the output should continue to expand, as the yield was largely regulated by the facilities available in 1935-36. A small township has been planned on the field and the population at the 31st March, 1936, was 533, including 92 women and 28 children. Although the mica deposits in the Territory are not exploited systematically or on a large scale, a number of men—mostly southern Europeans—have been engaged in this class of mining and during the year produced nearly £8,000 worth of mica.

(ii) *Mineral Production.* The following table shows the value of the total mineral production for the last five years :—

NORTHERN TERRITORY.—MINERAL PRODUCTION.

Year.	Gold.	Tin Ore.	Silver-lead Ore.	Copper Ore.	Mica.	Wolfram.	Tantalite.	Total Value all Minerals
	£	£	£	£	£	£	£	£
1931-32 ..	4,106	2,322	..	137	5,517	1,309	240	13,811
1932-33 ..	4,449	2,519	410	..	10,772	..	..	18,150
1933-34 ..	8,124	9,566	11	..	7,926	3,114	65	28,806
1934-35 ..	44,458	6,036	..	..	15,762	10,380	264	76,900
1935-36 ..	76,000	4,176	..	1,871	7,805	8,747	..	98,599

In 1934 the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of a geological and geophysical survey of certain areas in the northern parts of Australia, including the Northern Territory. More detailed reference to the survey and its progress will be found in Chapter XVIII.—Mineral Industry.

5. Pearl, Bêche-de-Mer, and Other Fisheries.—In 1884 mother-of-pearl-shell was discovered in the harbour of Port Darwin. Difficulty in working, principally through heavy tides and muddy water, retarded the development of the industry for many years. Most of the production is now won from a bed of shell approximately 50 to 60 miles north-west of Bathurst Island and 27 pearling vessels were licensed during 1935-36. On account of losses in previous years the Commonwealth Government made a grant of £1,000 to the companies concerned during 1935-36, and this, coupled with a steady overseas demand for Territory shell, helped to stabilize the local industry. The production of pearl-shell in 1935-36 amounted to 743 tons of an approximate gross value of £71,000, a distinct advance on the output of 474 tons in 1934-35. The local pearlers, however, encounter considerable opposition from efficient Japanese fleets.

Seven fishing licences and five boat licences were issued during 1935-36 in connexion with bêche-de-mer fisheries, although export prices were not attractive.

The territorial waters teem with fish, but only twelve fishermen and four boats were employed in maintaining a supply of fish for Darwin for the greater part of the year, the fish retailing at 6d. per lb.

The production of raw salt from the tidal salt pans at Fannie Bay during 1935-36 was 210 tons, valued at £7 per ton. The salt is comparatively free of foreign matter, an analysis revealing an actual sodium chloride content of 98.05 per cent.

§ 6. Land Tenure.

A description of the system of land tenure in force in the Territory will be found in Chapter V.—Land Tenure and Settlement, Official Year Book No. 22.

§ 7. Commerce, Shipping and Air Services.

1. Trade.—No record is kept of the trade between the Commonwealth States and Territories. The value of the direct overseas imports and exports for 1901 and for each of the last five years is given hereunder :—

NORTHERN TERRITORY.—OVERSEA IMPORTS AND EXPORTS.

Items.	1901.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£	£
Imports (a) ..	37,539	9,884	4,225	28,320	39,870	13,221
Exports (b) ..	29,191	20,624	10,427	6,303	27,411	42,330

(a) British currency values.

(b) Australian currency values.

The importation of residual oil was mainly responsible for the increase during the two years ended 1934-35 while the shipments of pearl-shell were the cause of the rise in the value of exports during the past two years.

2. *Shipping*.—The Territory is dependent for its shipping facilities chiefly on the services of vessels trading between Melbourne and Singapore. In addition to pearlers and other small craft, larger vessels make occasional visits, while a sixty-days' service between Fremantle and Darwin is carried out by the *Koolinda*, belonging to the Western Australian State Shipping Service.

NORTHERN TERRITORY.—SHIPPING.

Period.	Arrivals.		Departures.	
	No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.
1930-31	39	111,144	39	111,453
1931-32	39	95,560	39	96,632
1932-33	38	95,834	38	97,011
1933-34	39	98,986	37	94,624
1934-35	58	108,306	47	108,909
1935-36	55	117,757	55	117,757

The foregoing figures are exclusive of particulars of coastwise shipping. During 1935-36 six vessels of 126 tons net were entered at Darwin as coastwise.

3. *Air Services*.—Darwin is the first port of arrival in Australia of aircraft from Europe, Singapore and Netherlands East Indies. Qantas Empire Airways Ltd. maintains a regular bi-weekly service in each direction over the Brisbane-Darwin-Singapore route. The MacRobertson-Miller Aviation Co. Ltd. also operates twice weekly between Perth and Daly Waters, linking up with the Qantas service at the latter point. Guinea Airways Ltd. has operated a service between Adelaide and Darwin since February, 1937.

§ 8. Internal Communication.

1. *Railways*.—Under the agreement made between the Commonwealth and the State of South Australia for the surrender and acceptance of the Northern Territory, which was ratified by the Northern Territory Acceptance Act 1910, the Commonwealth is to construct the Northern Territory portion of the transcontinental railway line (connecting Adelaide and Darwin, via Port Augusta).

The Northern line from Adelaide terminated at Oodnadatta, about 100 miles south of the southern boundary of the Territory, but has been extended to Alice Springs, an addition of 202 miles. The line from Darwin to Katherine River, about 200 miles, has been extended as far as Birdum, 310 miles from Darwin. The completion of the remainder of the gap would give access to broad belts of pastoral and mineral country towards the centre of Australia. The Commonwealth Government acquired on 1st January, 1911, the property in the line from Port Augusta to Oodnadatta (478 miles), and on 1st January, 1926, the control thereof was transferred to the Commonwealth Railways Commissioner. (*See under Federal Railways*.)

2. *Posts*.—Postal communication is maintained by vessels belonging to Burns, Philp and Co., which carry on a monthly service between the Territory and the Eastern States. In addition, the vessels belonging to the State Steamship Service of Western Australia give a service once every 60 days between Fremantle and Darwin. Mail is also carried between Brisbane and Darwin by the Qantas Empire Airways Ltd., and between Perth and Daly Waters by the MacRobertson-Miller Aviation Co. Ltd. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, while the southern districts are served via Adelaide.

3. **Telegraphs.**—The transcontinental telegraph line, covering a length of 2,230 miles, was completed on the 22nd August, 1872, at a cost of nearly £500,000. The line runs in a northerly direction from Adelaide to Darwin, whence telegraphic communication is provided with Asia and Europe, via Banjoewangie (Java), Singapore and Madras. Between Darwin and Banjoewangie the submarine cable is duplicated.

High-power wireless stations have been constructed by the Federal Government at Wave Hill in the Territory, and at Camooweal, just over the eastern boundary, in Queensland.

§ 9. Finance.

In the Commonwealth finance statements separate accounts are given for Northern Territory administration. Revenue and expenditure for 1935-36 are given below:—

REVENUE AND EXPENDITURE.—NORTHERN TERRITORY, 1935-36.

REVENUE.	£	EXPENDITURE.	£
Taxation—		Northern Territory Adminis-	
Customs and excise ..	5,364	tration	128,018
Sales tax	565	Other departments	5,671
Land and Income tax ..	4,448	New Works	40,557
Probate and Stamp duties ..	852	Repairs, maintenance, &c. ..	19,986
Postal, Telegraph, and Telephone	15,900	Railways—	
Railways—		Working expenses	179,141
North Australia	30,656	New Works	3,565
Central Australia	98,634	Interest	321,634
Territorial	24,314	Sinking Fund	52,810
Miscellaneous	23,960	Post, Telegraph and Telephone ..	19,194
Deficiency on year's trans-		Interest	24,876
actions	611,439	Sinking Fund	4,179
		Unemployment relief	4,739
		Miscellaneous	11,762
Total	816,132	Total	816,132

THE FEDERAL CAPITAL TERRITORY.

1. **Introductory.**—In Year Books Nos. 4 and 5, information was given in Section XXXI., in regard to the events leading to the selection of the Federal Capital Territory and the necessary legislation and the progress of operations in connexion with the establishment of the capital city. The physiography of the Territory was dealt with extensively and topographical and contour maps accompanied the letterpress, as well as reproductions of the premiated designs for the laying out of the city. Considerations of space, however, preclude the repetition of this information. On the 12th March, 1913, the official ceremony to mark the initiation of operations in connexion with the establishment of the Seat of Government was carried out. At this ceremony the selection of "Canberra" as the name of the capital city was announced. (A special article contributed by Dr. F. Watson, entitled "Canberra Past and Present", appeared on page 454 of Year Book No. 24.)

2. **Transfer of Parliament.**—On 6th May, 1927, Parliament House at Canberra was officially opened by His Royal Highness Albert, Duke of York, the occasion being the 26th anniversary of the opening of the first Parliament of the Commonwealth at Melbourne by His Royal Highness George, Duke of Cornwall and York afterwards His Majesty King George V.—on the 9th May, 1901. (For particulars of the opening ceremony see Year Book No. 21, page 604.)

3. **Administration.**—In Year Book No. 18, a summary was given of the development of the administration prior to the taking over of the control of the Territory by the Federal Capital Commission, and in Year Book No. 22, a summary was given of the administrative activities of the Federal Capital Commission.

The administration of the Territory by the Federal Capital Commission was continued until the 30th April, 1930, when the Seat of Government (Administration) Act 1924-1929 was repealed, and the powers and functions of the Commission reverted to the Government. The new Administration provided for the general control of the Territory by the Minister for Home Affairs, with the assistance of the Department of Public Health in health matters, the Department of Works in the operation of the engineering services and in the construction of works, and the Attorney-General's Department in the administration of the Courts, Police and Probate, and the Registration of Titles.

An Advisory Council to advise the Minister on matters of local concern was established on the 1st May, 1930, by Ordinance under the Act, and a Civic Administrator was appointed under the Ordinance as Chairman of the Advisory Council and to carry on the general administration of the Territory under the Minister and subject to the specific services being undertaken by the other Commonwealth Departments mentioned.

The Advisory Council consisted of the Secretary, Department of Home Affairs; the Director-General of Health; the Secretary, Department of Works; the Civic Administrator; and three residents elected for two years under a system of adult franchise.

On the 12th April, 1932, the Departments of Home Affairs and Works were abolished and the Department of the Interior was established in lieu thereof. The office of Civic Administrator was abolished, and the constitution of the Advisory Council was altered to provide that the nominated members of the Council should consist of the Director-General of Health, and three officers of the Department of the Interior, namely, the Assistant Secretary (Works and Services); the Surveyor-General and Chief Property Officer; and the Assistant Secretary (Civic Administration).

Under the new administration, the general control of the Territory is exercised by the Minister for the Interior, but the specific services undertaken by the Department of Health and the Attorney-General's Department are being continued by those Departments.

4. **Progress of Work.**—The general progress of the work of construction up to the time the Territory was taken over by the Commission was outlined in Year Book No. 18. Later progress made under the Commission was described in Year Book No. 22.

Structures completed after the commencement of the Departmental form of administration comprised the Australian Institute of Anatomy with laboratories and accommodation for the museum of Australian fauna; laboratories of the divisions of Economic Entomology and Plant Industry of the Council for Scientific and Industrial Research; and a public swimming pool equipped with a modern filtration chlorination plant.

During the year 1936-37 additions were made to Hotel Kurrajong, No. 2 Secretariat Building and the Transport Depot at Kingston. New buildings constructed include a steel framed hangar at the Canberra Aerodrome, the W. J. Farrer Memorial at "Lambrigg," Tharwa, and a Departmental Record Store at Kingston. One hundred and fifty-one residences were built and contracts let for 50 additional residences. Contracts were also let for the erection of new school buildings at Ainslie and a fire station at Manuka. Two cadet barracks, a recreation and kitchen block, a science and class room block, also an administrative block were completed at the Royal Military College, Duntroon.

The following engineering works were commenced or completed :—Diversion of Majura Road to permit of the enlargement of the Canberra Aerodrome; construction of a road from Lees Springs to Mount Franklin and path to foot of southern slope; straightening and re-alignment Cotter Road; deviation Brindabella Road to eliminate four crossings

of Coree Creek; deviation Tharwa Road at Tuggeranong; construction of roads in new subdivisions at Deakin, Forrest, Griffith, Kingston; construction of footpaths; kerbing and channelling, approximately $1\frac{1}{2}$ miles of streets; construction of avenue roads; bituminous surfacing of streets; construction of bridge over Molonglo River at Duntroon; water supply, sewerage and stormwater reticulation in connexion with new subdivisions at Ainslie, Deakin, Forrest, Griffith and at Canberra Aerodrome; improving Telopea Park stormwater channel; extension of stormwater drainage, North Ainslie and Kingston; extending and increasing capacity Mount Ainslie stormwater drain; completion engineering works, Royal Military College, Duntroon; completion of duplication rotary sprinkling filters, Western Creek Sewerage Treatment Works, and construction of new sedimentation tanks, etc.; supplying and laying new steel water main Mount Stromlo to City; construction north-western intercepting sewer; installation heating system in Entomological Laboratory, and additions to No. 1 Secretariat Building and Government Printing Office; air conditioning system Cabinet Room, etc., Parliament House; installation hot water service new wings, Hotel Kurrajong, and providing larger steam boilers at Hotel Kurrajong and Brassey House; extension of electric supply mains to new buildings and subdivisions, also extension of street lighting; preliminary work for supply of electricity to rural areas and also for equipment of Canberra Aerodromes for night flying, with installation of Neon beacon and radio beacons.

The preparation and planting of the following areas were proceeded with:—London Circuit, Rottenberry Road, Liversidge Street, McCoy Street, Patents Office grounds, Leichhardt Street, Kingston, Cemetery Road, streets of new subdivisions Kingston, and development of Anzac Park. The planting of trees and block line hedges was continued during the year. Parks, gardens and recreation areas were satisfactorily maintained.

5. Forestry.—A considerable amount of reafforestation work has been undertaken, and plantations have been established at Uriarra, Mount Stromlo, Pierce's Creek and Kowen. Experimental plots have also been established at Coree and Pierce's Creek, and sylvicultural work is being carried out at Black Mountain.

The total area of plantations to 30th June, 1936, was 10,575 acres. Forestry operations were begun on Mount Stromlo in 1915, and up to 1925 approximately 700 acres had been planted with pine and other trees. The plantings up to this time were chiefly on aesthetic lines, but since the initiation of the wider programme, arrangements have been made for pruning and thinning.

In 1926 a comprehensive review was undertaken of the Territory's potentialities in regard to forest development. A system of forestry management was instituted in the existing forest areas, and a considerable amount of survey and assessment work has been completed.

In the initial stages *pinus radiata* was most extensively planted, but, as a result of experimental work, plots of better quality pines on a longer rotation, such as *pinus ponderosa*, *Jeffreyi* and *laricio* were planted during recent years.

6. Lands.—(i) *In the Federal Capital Territory.* Reference has been made in previous issues of the Official Year Book to the general conditions of land tenure in the Territory for the Seat of Government and to the area of alienated and leased land.

As considerable portions of the Territory lands are not required in connexion with the establishment of the city, large areas have been leased under special improvement conditions in regard to the extermination of noxious weeds and the destruction of rabbits and other pests. The lands are classified into three grades of agricultural and three grades of grazing land. About 300,000 acres comprising 417 leases are at present held under lease for periods varying from quarterly tenure to 25 years. In addition leases have been granted over an area of approximately 12,000 acres in the Jervis Bay Territory.

Auction sales of city leaseholds are described in Year Book No. 22, p. 599.

Six leases for church purposes have been granted under the Church Lands Leases Ordinance 1924-1932, which requires the lessees to submit a definite building programme within a specified period, and a further eight leases have been granted for church and scholastic purposes under the Leases (Special Purposes) Ordinance 1925-1936.

The total number of leases granted under the City Area Leases Ordinances, not including surrendered leases, at the end of the financial year 1935-36 was 331, representing a capital value of £181,702. During the year 30 new leases were granted. The number of business and residential blocks surrendered to or determined by the Commonwealth to the end of the year was 244.

Under the terms of the City Area Leases Ordinances 1936 each block is leased for a period of 99 years at a rental of £5 per centum per annum of the unimproved capital value as assessed by the Commonwealth or bid at auction. In conformity with the general reduction of interest in consequence of the financial crisis rentals under this Ordinance have been reduced to 4 per centum of the unimproved capital value until 30th June, 1941.

(ii) *Land at Jervis Bay.* The Commonwealth has acquired from the State of New South Wales sovereign rights over the area comprising about 28 square miles of land and water at Jervis Bay for possible use as a port in connexion with the Federal Capital. The Royal Australian Naval College was established in this area on a site known as Captain's Point, but was removed in 1930 to Flinders Naval Base, Victoria. Nearly all of the remaining lands have been leased.

A scheme for the use by tourists of the residences and other buildings at Jervis Bay has been put into operation, and it has proved a considerable attraction, affording a seaside resort for residents of the Territory as well as for visitors from other places.

7. *Railways.*—Canberra is connected with the railway system of New South Wales by a line $4\frac{1}{2}$ miles long to Queanbeyan. This line was opened for goods traffic on the 25th May, 1914, and for passenger traffic on the 15th October, 1923. The railway terminus is situated in the area known as Kingston.

A direct passenger service is in operation connecting Canberra with Sydney and Melbourne, and trains leave both cities for Canberra daily except Saturdays. Improved facilities for goods traffic have also been provided.

A trial survey of a line between Canberra and Jervis Bay has been made, and plans prepared to enable an estimate of the cost of the line to be obtained, but no action in regard to this project is contemplated at present.

Under the provisions of the Seat of Government Surrender Act 1909 of New South Wales and the Seat of Government (Acceptance) Act 1909 of the Commonwealth an agreement exists between the Commonwealth and the State of New South Wales in relation to the construction of a railway from Canberra to Yass—a distance of, approximately, 43 miles, of which about 32 miles extend through New South Wales. The State is required to construct its portion of the line as soon as the Commonwealth builds a line to the boundary of the Territory.

8. *Population.*—The census return of population on the 30th June, 1933, was 8,766 in the Federal Capital Territory and 181 in Jervis Bay Territory, or a total of 8,947 persons. The estimated population at 31st December, 1936, was 9,787.

9. *Live Stock.*—The number of live stock depastured at 31st March, 1930, were:—Horses, 1,060, cattle, 10,186, and sheep 228,317.

10. *Educational Facilities.*—Arrangements have been made with the New South Wales Education Department to continue for the time being the administration of education in the Territory, the expenditure involved being refunded annually to the State. There are thirteen schools in the Territory, including one at Jervis Bay. The largest of these is Telopea Park Intermediate High School, which is situated on the

south side of the city area. It has accommodation for 1,000 scholars, and its curriculum provides a standard of education comparable in range of subjects with that provided at the best of the Government High Schools in New South Wales, thus permitting scholars to qualify for entrance to the Universities.

The School also provides for Junior Technical, Commercial and Trades School Branches, as well as Evening Commercial and Matriculation Classes.

The Trades School, which is excellently equipped, supplies the necessary training for apprentices and journeymen who are desirous of improving their respective trade qualifications. Provision at the School has also been made for Domestic Science and Dressmaking Sections.

A Vocational Training School has been established for the training of unemployed youths, and as an adjunct to the apprenticeship scheme which has been introduced. The classes at present operated are motor mechanics, plumbing and sheet metal work, carpentry and joinery, and bricklaying. The number of classes will increase as occasion demands.

An Infants' School with accommodation for 450 children has been erected on the north side of the city, where for the present scholars of the primary standard on the north side of the river are being catered for. The balance are small rural schools serving the needs of leaseholders settled in the Territory. The erection of a High School and of additions to the Ainslie School have been approved. Both facilities are needed to meet the requirements of increasing population.

Reference to the establishment of a University College at Canberra will be found in Chapter VI., Education, herein.

There are at present four private schools in the Territory. The Canberra Grammar School for Boys, Canberra Church of England Grammar School for Girls, St. Christopher's Convent—all of which provide for primary and secondary education, and a new primary and sub-primary school—St. Patrick's—with accommodation for 90 scholars, which was recently erected by the Roman Catholic Church.

11. Finance.—(i) *Financial Year 1935-36.* Receipts and Expenditure for the financial year 1935-36 are given in the table hereunder:—

FEDERAL CAPITAL TERRITORY.—RECEIPTS AND EXPENDITURE, 1935-36.

Receipts.		Expenditure.				
Items.	Amount.	Items.	Capital.	Maintenance.	Other.	Total.
	£		£	£	£	£
Rent and rates ..	132,660	Architectural services ..	106,216	29,618	..	135,834
Electricity ..	23,000	Engineering services ..	139,779	65,870	..	205,649
Motor registration and fees ..	10,310	Forestry ..	13,066	..	..	13,066
Hospital tax ..	6,088	Loans for housing ..	21,964	..	..	21,964
Hotels ..	12,000	Sundry works and services ..	10,043	25,899	..	35,942
Transport and City Bus Service ..	67,606	Buildings and Engineering services for Health Department ..	798	..	..	798
Sales of goods, manufactured products, etc. ..	225,621	Education ..	..	..	27,212	27,212
Miscellaneous ..	80,049	Hospital Working expenses ..	..	..	12,000	12,000
		Interest and Sinking Fund ..	..	..	283,179	283,179
		Administrative ..	..	..	46,110	46,110
		Hotels—Working expenses ..	..	..	41,976	41,976
		Transport and City Bus Service—Expenses ..	..	..	67,134	67,134
		Factory Stores, etc.—Working expenses ..	..	..	211,071	211,071
		Miscellaneous—Police, Fire Brigade, etc. ..	..	..	65,852	65,852
Total Receipts ..	600,056	Total Expenditure ..	272,867	133,376	752,734	1,158,977

(ii) *From Date of Selection of Site to 30th June, 1936.*—The total receipts and expenditure from the date of selection of site to the 30th June, 1936, were as follows:—

FEDERAL CAPITAL TERRITORY.—RECEIPTS AND EXPENDITURE TO 30th JUNE, 1936.

Receipts.		Expenditure.	
Items.	Amount.	Items.	Amount.
	£		£
Commonwealth Treasury—		Lands	916,851
Parliamentary Appropriations—		Engineering works	3,650,935
Revenue	4,311,574	Architectural works	3,125,277
Loan	5,748,942	Other capital expenditure, sundry debtors, etc.	716,332
			8,409,095
		Seat of Government Establishment Account, being maintenance and administration less revenue; expenditure of a capital nature for which assets no longer exist; profit and loss accounts of trading activities, etc.	1,651,421*
Total Receipts	10,060,516	Net Expenditure	10,060,516

* Does not include accumulated interest.

The above table was prepared by the Department of the Interior and does not include the expenditure on National Buildings such as Parliament House, the Secretariats, etc.

NORFOLK ISLAND.

1. *Area, Location, etc.*—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 3' 45" South, longitude 167° 58' 6" East. Its total area is 8,528 acres, the island being about 5 miles long and 3 miles wide. From Sydney it is distant 930 miles, and from Auckland, 630 miles. The coast line is 20 miles, and its form that of an irregular ellipse. Except on the south-west, inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 49° and 85°, with a mean of 68°. The average annual rainfall is 53 inches. It has been said that the salubrious climate, coupled with the beauty of its land and sea scapes, should combine to render Norfolk Island "the Madeira of the Pacific." The island is visited annually by a number of tourists, and with improved shipping facilities this traffic is likely to increase. A tourist bureau has been established on the Island.

2. *Settlement.*—The first colonization, in 1788, was by Lieutenant King, who in H.M.S. *Supply* established a small penal station as a branch settlement of that at Port Jackson. The settlement was abandoned in 1813, and for 13 years thereafter its chief use was as a whaling station and place of call for British warships.

From 1826 to 1855 it was again made a penal station. In 1844 it was annexed to Van Diemen's Land (Tasmania).

The descendants of the *Bounty* mutineers, having become too numerous to subsist on Pitcairn Island, were removed thence to Norfolk Island in 1856. The new community numbered 94 males and 100 females—and were the descendants of British sailors and Tahitian women. Two of these were still alive at 30th June, 1937.

3. *Administration.*—In 1850 the island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later in 1806 it was made a dependency under the Governor of that Colony, and finally by the passage of the Norfolk Island Act 1913 it was accepted by the Federal Parliament as a territory of the Commonwealth. From July, 1914, until 1st January, 1929, Norfolk Island was administered by the Department of Home and Territories, but it is now administered by the Territories Branch of the Prime Minister's Department through an Administrator. An amending

measure, the Norfolk Island Act 1935 provides for the establishment of an Advisory Council of eight elected members to advise the Administrator on any matter affecting the Island.

4. **Population.**—The population at the 30th June, 1936, was 1,142, consisting of 610 males and 532 females. In the year 1935-36, 10 births, 15 deaths, and 9 marriages were recorded. The average age of the persons who died was 52 years. Departures from the Island exceeded arrivals by 14, the respective figures being: departures 271, arrivals 257.

5. **Live Stock.**—The latest returns of live stock show that in October, 1934, there were on the island 1,636 cattle, 718 horses, 292 sheep and 158 pigs. In addition, there were 5,581 head of poultry.

6. **Production, Trade, etc.**—The soil throughout is good and is specially suitable for the cultivation of bananas, citrus and other fruits. The Canadian Wonder bean seed is one of the staple crops of the Island.

Apart from the bean, agriculture generally has been depressed, but the prospects are now brighter. The lifting of the embargo on citrus fruits by the New Zealand Government was responsible for a direct shipment of 2,365 cases of oranges to that country in 1935-36. Indications point to further development of the passion fruit pulp industry, the exports of which have risen from 336 gallons of pulp in 1933-34 to 3,312 gallons in 1935-36. A Sydney company has erected a substantial modern factory on the Island for the treatment of the passion fruit, and has contracted to buy all sound fruit at remunerative prices for a number of years ahead. Growers of bean seed have encountered torrential rains during the last two harvesting periods, with consequent reduction in seed available for export; 804 bushels were exported in 1935-36 for which good prices were realized.

Large numbers of whales pass the island throughout the season, but whaling has now practically ceased. The preserved fish industry which was established some years ago has been abandoned, although such fish as trevalla, kingfish, schnapper and many others are plentiful.

On the 30th June, 1936, the total area of land held under freehold and Crown leasehold amounted to 6,819 acres, consisting of 4,522 acres freehold and 2,297 leasehold.

Imports and exports for the last five years are given hereunder; the values are expressed in Australian currency:—

NORFOLK ISLAND.—IMPORTS AND EXPORTS.

Country.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
IMPORTS.					
From—	£	£	£	£	£
Australia	27,792	25,392	27,760	26,260	28,657
New Zealand	11,264	5,457	716	..	..
Pacific Islands ..	1,222	72	184	258	140
Total	40,278	30,921	28,660	26,518	28,797
EXPORTS.					
To—	£	£	£	£	£
Australia	12,236	18,795	15,714	8,170	8,283
New Zealand	8,290	2,943	105	..	921
Pacific Islands ..	29	54	74	148	203
Total	20,555	21,792	15,893	8,318	9,407

Duties of Customs are levied on the following goods imported into Norfolk Island for home consumption :—

IMPORT DUTIES SCHEDULE.

Article.	Unit.	Rate of Duty.	Article.	Unit.	Rate of Duty.
		<i>s. d.</i>			<i>s. d.</i>
Spirits	pr. gal.	30 0	Chicory	lb.	0 3
Ale, beer, porter and cider	gal.	2 6	Petroleum, etc. ..	gal.	0 3
Wine, still—			Kerosene, etc. ..	"	0 3
Australian ..	"	5 0	Residual oil, etc. ..	"	0 3
Other	"	10 0	Oil, med.	"	5 0
Wine, sparkling—			Lubricating oils ..	"	0 3
Australian ..	"	15 0	Sugar	cwt.	3 0
Other	"	25 0	Molasses, etc. ..	"	2 0
Tobacco, manufactured or unmanufactured—			Biscuits	lb.	0 1
Australian leaf ..	lb.	2 0	Candles	"	0 1
Other leaf	"	4 0	Confectionery ..	"	0 3
Cigars and cigarettes ..	"	6 0	Dried fruits—		
Tea	"	0 3	Australian ..	"	0 1
Coffee	"	0 3	Other	"	0 3
			Jams, jellies and pre- serves	"	0 1

No duties are chargeable on goods imported into Australia from Norfolk Island if the goods—(a) are the produce or manufacture of Norfolk Island; and (b) are shipped direct to Australia; and (c) are not goods which if manufactured or produced in Australia would be subject to any duty of excise.

7. Communication.—The "all-red" cable from Great Britain via Vancouver, Fanning Island and Fiji, bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane.

An alternate 12 and 30 days' shipping service to the Territory is maintained by the vessels of Burns, Philp & Co. Ltd., Sydney, under the terms of the contract with the Commonwealth Government for the maintenance of shipping services to the Pacific Islands.

On one voyage the SS. *Morinda* leaves Sydney, calls at Lord Howe Island and Norfolk Island and then proceeds to the New Hebrides, returning to Sydney by the same route. The same vessel then makes a short trip to Norfolk Island and returns to Sydney calling at Lord Howe Island on both the outward and inward voyages.

The journey from Sydney to Norfolk Island occupies four days.

8. Social Condition.—Education is free and compulsory up to the age of fourteen years. The school conforms to the Australian standard of public education, ranging from kindergarten to the intermediate certificate, with a two years' superprimary course of instruction in cultural subjects and in agriculture, woodwork, metalwork, etc. The headmaster and two assistant teachers are lent by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30th June, 1930, was 145. There is also a small privately-conducted school on the Island.

The Court of Norfolk Island provided over by a Chief Magistrate is a court of record with dual jurisdiction. Sitting in its Limited Jurisdiction the Court has power to hear and determine actions of claims not exceeding £30 and to punish summarily all

crimes and offences involving a pecuniary penalty or a sentence of imprisonment not exceeding six months. In its Full Jurisdiction the Court can hear and determine all actions, punish all crimes and offences, grant probate and letters of administration, hear and determine appeals from any conviction of the Court sitting in its limited jurisdiction, and has authority in all other matters.

9. *Finances.*—The whole of the Territorial revenue together with an annual grant from the Commonwealth Government in aid of administrative expenses is paid to the credit of the Norfolk Island Trust Fund Account, and all administrative and developmental expenses are paid from that account. The operations for the year 1935-36 were as follows:—

NORFOLK ISLAND TRUST FUND ACCOUNT, 1935-1936.

Items.	Receipts.	Items.	Expenditure.
	£		£
Balance carried forward ..	8,957	Salaries	5,239
Commonwealth Grant—		Purchase of liquor	2,219
Ordinary	4,000	Relief work	1,702
Special	3,200	Repairs and maintenance ..	1,049
Customs duties	2,737	Miscellaneous	4,533
Sale of liquor	3,161	Balance	9,093
Miscellaneous	1,780		
Total	23,835	Total	23,835

PAPUA.

§ 1. General Description.

1. *Early Administration.*—Particulars of the early administration of Papua were given in Official Year Book No. 19, p. 576.

2. *Administration by Commonwealth of Australia.*—The Territory was placed under the authority of the Commonwealth on 1st September, 1906, by proclamation issued in pursuance of Letters Patent of the 18th March, 1902, and was accepted by the Commonwealth by the Papua Act 1905, which came into force by virtue of the proclamation aforesaid. The transfer was made under the authority of section 122 of the Constitution. The Territory is now under the administration of the Commonwealth, but not included within it, and is divided into magisterial districts.

3. *Area, etc.*—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Suvest and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 500 miles; towards either end the breadth from north to south is about 200 miles, but about the centre it is considerably narrower. The Territory comprises also the islands of the Trobriand, Woodlark, D'Entrecasteaux and Louisiade groups. The length of coast-line is estimated at 3,004 miles—1,728 on the mainland, and 1,036 on the islands. The total area is about 60,000 square miles, of which 87,786 are on the mainland, and 2,754 on the islands. A reference to the physical characteristics of the Territory appears in previous issues of the Official Year Book (*see* No. 18, p. 633).

§ 2. Population.

The white population of Papua at the census of the 30th June, 1936, was 1,203, made up of 733 males and 470 females. The following table gives the white population in each of the last five years :—

WHITE POPULATION OF PAPUA.

YEAR ENDED 30TH JUNE.

1932.	1933.	1934.	1935.	1936.
1,152	1,148	1,107	1,229	1,203

It is not possible to give exact data regarding the number of natives, because a large area of the interior is not yet under Government control. The official estimate is 275,000. Such censuses of the native population as have been taken during recent years point to a slight increase. The coloured population, other than Papuans, on 30th June, 1933, was 786, and included many mission teachers from Samoa, Fiji and other Pacific Islands. On the same date, half-castes, with one of the parents a European, were 227. An Immigration Restriction Ordinance prohibits the immigration of persons who fail to pass the dictation test, or who are of bad character, or likely to become a charge upon the public. Exemptions may, however, be granted by the Lieutenant-Governor to persons of special skill required for employment as overseers or foremen.

§ 3. Native Labour, Taxation, Health, etc.

1. **Native Labour.**—Information regarding the conditions connected with the employment of native labour will be found in Official Year Book No. 22, p. 607.

The number of natives who served under contracts of service for various periods during 1935-36 was 11,340, and the approximate number of non-indentured labourers was 2,928; the latter is of course only estimated, and cannot be taken as quite reliable.

2. **Native Taxes.**—Under the Native Taxes Ordinance, 1917-1932, a tax not exceeding £1 per annum may be imposed on natives, excepting native constables, mission teachers, natives unfit for work, and those who have four living children. The proceeds of the tax must be expended on native education, or devoted to purposes directly benefiting the natives, as may be prescribed.

The taxes collected in 1935-36 amounted to £11,440, of which £2,716 was transferred to the Native Education Fund, and £9,700 to the Native Benefits Fund. The Native Education Fund during the year 1935-36 disbursed to primary and technical education £5,197, and to agricultural education £146, leaving a credit balance of £15,816. From the Benefits Fund the expenditure included:—Anthropology, £1 344; health, £5,911; village improvements, £248; family bonus, £1,302; and games in villages, £10.

3. **Care of Half-caste Children.**—An Ordinance was passed in 1922 to provide for the care and maintenance of neglected half-caste children. The Ordinance provides that a sum of £26 per annum shall be paid to the Commissioner for Native Affairs by the adjudged father of the child until the child, if a boy, shall reach the age of 16 years, or, if a girl, 18 years.

4. **Health.**—The two principal native hospitals are in Port Moresby and Samarai; but minor hospitals are attached to the out-stations. Hospitals are also conducted by the various mission societies and plantation companies. The mission societies employ two doctors and a number of trained nurses. Several European medical assistants are employed by the Government. During the past four years parties of natives have received a six months course of instruction in first aid and in elementary physics,

chemistry, anatomy, physiology and pathology at the School of Public Health and Tropical Medicine, University of Sydney. On their return to the Territory the natives are employed as travelling native medical assistants. The chief complaints treated are yaws, ulcers, lung affections, hookworm, venereal and skin diseases. The death rate amongst native labourers was 1.31 per cent. in 1935-1936.

§ 4. Land Tenure.

1. Method of Obtaining Land.—The broad principles upon which the land laws of Papua are based are:—(a) no land can be alienated in fee simple; (b) the rental of the land leased is assessed on the unimproved value of the land, and is subject to re-appraisal at fixed periods. The terms upon which land may be leased are very liberal. Leaseholds of the best class of agricultural land may be obtained for 99 years. No rent is payable during the first ten years of the lease on areas less than 1,000 acres. During the following ten years the rent is charged at the rate of 5 per cent. on the unimproved value of the land. The unimproved value of the land is appraised every twenty years and the rent determined accordingly. If on any appraisal the rent is raised by more than one-third the lessee may disclaim the lease and shall be entitled to receive compensation for his improvements. The unimproved value of agricultural land has been fixed at 5s. per acre. Rent is immediately payable on areas exceeding 1,000 acres, and survey fees on areas exceeding 100 acres.

2. Holdings.—On the 30th June, 1932, the lands of the Territory were held as follows:—

PAPUA.—HOLDINGS, 1932.

Description.	Area.
	Acres.
Land held by the natives	56,899,084
Crown land	831,835
Freehold land	22,932
Leasehold land	191,749
Area of Territory	57,945,600

Private sales of land in the Territory have now ceased. The Government buys from the natives, and then leases to planters, who are forbidden to have direct dealings in land with Papuans.

Of the total area of 191,749 acres shown above, agricultural leases accounted for 176,915, pastoral leases for 13,757, special leases for 150 and mission leases for 501.

The total area of leases granted during the year was 36,001 acres, and Crown rents on leaseholds for the year 1935-36 amounted to £4,816.

§ 5. Production.

1. General.—The products of the Territory are obtained from its agricultural, forestal, fishing, mining and manufacturing industries. Gold is the principal mineral mined, and copra occupies the foremost position amongst plantation products followed by rubber. Portions of the Territory appear well suited for cotton cultivation, and there is a possibility of obtaining petroleum in marketable quantities. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and imported direct to Australia for home consumption.

2. *Agriculture.*—(i) *Soil and Rainfall.* Rich soils at varying elevations and heavy and evenly distributed rainfall favour the cultivation of a variety of tropical products including sugar cane, coconuts, sago palm, bread fruit, dyewoods, spices, ginger, nutmegs, bananas and other fruits. There are large areas of rich alluvial and volcanic soils along the coast, and fertile land is found at elevations up to 6,000 feet. Heavy rainfalls occur, except over a belt of country which runs back from the coast to the hills, and which has its dry season from May to November. This “dry” area is admirably suited for the production of tobacco, fibres, cotton, etc. There are 20 meteorological stations throughout the Territory, and an economic museum and agricultural library have been established.

(ii) *Plantations.* Agricultural settlement has been mostly in the Central and Eastern Divisions with coconuts, rubber, coffee and sisal hemp as the principal crops. The natives are compelled by an ordinance to plant coconuts for food supply. In addition to the coconuts in these plantations, many more are planted over small and widely scattered areas by the older natives in accordance with custom. The Native Plantations Ordinance provides for the establishment of plantations in which half of the proceeds is paid to the natives entitled thereto, and the remaining half paid into the Native Education Fund. The following table shows the areas under the different crops during the past five seasons :—

AREA UNDER CULTIVATION.

Crop.	1931.	1932.	1933.	1934.	1935.
	Acres.	Acres.	Acres.	Acres.	Acres.
Coconuts	49,413	49,305	47,921	49,033	47,642
Rubber	10,320	8,796	8,993	8,933	9,591
Sisal hemp	150	150	150	362	150
Kapok	267	121	79	86	128
Coffee	360	375	391	398	388
Rice	16	17	39	21	27
Sugar	30	46	53	54	50
Mauritius beans ..	75	100	70	80	..
Other	578	843	611	479	652
Total	61,209	59,753	58,307	59,446	58,628

(iii) *Government Plantations.* There are two Government plantations, the Orangerie Bay coconut plantation and the Kemp Welch rubber plantation. The profits during 1935-36 were £3,211, as against £1,470 in 1934-35.

3. *Forestry.*—According to the Commonwealth Inspector-General of Forests the principal softwood timber is known as “ilimo,” while among satisfactory timbers of the lowlands are “nara,” “medabi,” and “medila.” There are a large number of woods, varying from the softest to the hardest, including beautiful cabinet woods, but research is necessary to determine their usefulness. The development of a coniferous belt at the higher altitudes offers great possibilities. It is believed that teak and sandalwood are well suited for cultivation.

4. *Live Stock.*—At 31st December, 1935, the live stock in the Territory consisted of 650 horses, 6,302 head of cattle, 100 mules, 10 donkeys, 2,031 goats, 724 pigs, 5 sheep and 7,551 fowls. The introduction of rabbits, foxes, hares and monkeys is prohibited.

5. Fisheries.—Pearl-shell fishing occupies an important place in the industries of Papua. Considerable numbers of luggers are licensed, but the returns are mostly credited to Queensland, whose boundary approaches to within a few miles of the Papuan coast. The species of tortoise which supplies the commercial tortoise-shell is also a native of Papua. *Bêche-de-mer* and *trochus* are found along the shores and reefs, and form valuable articles of export.

6. Mining.—(i) *Variety of Minerals.* Minerals have been found over a wide range of country. Those discovered so far are—gold, copper, tin, lead, zinc, cinnabar, iron, osmiridium, gypsum, manganese, sulphur, graphite, chromite, lignite, platinum and petroleum. The existence of petroleum has been traced at scattered intervals over a large area.

Of precious stones, only the topaz and beryl have been obtained. Large beds of apparently good coal also exist.

(ii) *Gold.* Gold was discovered in 1888 and the search gradually spread over every division, finds being reported wherever the explorers went. The estimated quantity in fine ounces and the value of the gold yield for the last five years are given below:—

PAPUA.—GOLD YIELD.(a)

1931-32.		1932-33.		1933-34.		1934-35.		1935-36.	
Quantity. (b)	Value.	Quantity. (b)	Value.	Quantity. (b)	Value.	Quantity. (b)	Value.	Quantity. (b)	Value.
fine ozs. 8,014	£ 54,241	fine ozs. 9,387	£ 70,337	fine ozs. 10,814	£ 87,893	fine ozs. 16,136	£ 140,692	fine ozs. 19,254	£ 167,173

(a) Valued at average price realized for fine gold in Australia.

(b) Estimated.

Most of the rivers, with the exception of those flowing into the Gulf of Papua, have been declared open to gold-dredging, and good yields have been obtained. The total value of gold won to 30th June, 1936, was £2,106,153.

(iii) *Copper.* Owing to the very low prices ruling for copper in the world's market the copper mines in Papua have suspended operations. The total value of the copper exported to the 30th June, 1936, was £366,827.

(iv) *Other Minerals.* Some good samples of galena (sulphide of lead) have been obtained, while cinnabar (sulphur of mercury), graphite (or plumbago), zinc-blende, native sulphur, and other minerals are known to exist. In 1924 a deposit of lignite was discovered on Smoky Creek, a tributary of the Era River.

A mineral laboratory and museum have been fitted up, and are available to prospectors and others interested.

7. Water Power.—Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that there are at least 10,000,000 h.p. available for this purpose.

§ 6. Trade.

1. Customs Tariff.—In the Schedule to the Customs Tariff of Papua 136 items are mentioned of which approximately one-third are on the free list consisting of a number of foodstuffs and certain manufactures for use in the development of the Territory or its industries. Where duties are imposed they are generally on a 10 per cent. *ad valorem* basis, with the exception of ale, spirits, beverages and tobacco on which high revenue rates are imposed. Preference is given to Australian wines. On the 10th July, 1931, a primeage duty of 4 per cent. *ad valorem* was imposed on all goods whether dutiable or not in addition to the ordinary customs dues. The rate was subsequently reduced to 2½ per cent. and was recently withdrawn altogether. The value of imports into Papua during 1935-36 was £317,815 and the duty collected, £15,955, including primeage, £6,333.

The sum of £177 was received in export duties which are levied on pearl-shell and copra, in the latter case only on the excess above £20 per ton of a certain declared value deemed to be the London market price.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced and imported direct from Papua (*see* Chapter XVI., § 2 par. 4 (iii)), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Comparative tables of imports and exports during the past five years are given hereunder. The values of exports are expressed in Australian currency but it is not possible to accurately determine the meaning of the £ in the table of imports.

PAPUA.—IMPORTS AND EXPORTS.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
IMPORTS.					
	£	£	£	£	£
Ale, spirits and beverages ..	8,143	7,816	7,188	8,732	9,170
Tobacco and manufactures ..	22,808	22,254	17,948	23,297	21,075
Agricultural products and groceries	69,536	64,186	63,451	74,945	85,205
Textiles, felts, furs, attire, etc. ..	27,778	25,064	24,670	30,127	30,985
Metals and machinery ..	25,224	24,377	35,142	49,551	49,389
Oils, paints and varnishes ..	11,440	12,806	15,072	14,179	17,327
Earthenware, cement, glass, etc.	2,384	1,856	1,968	2,730	2,687
Drugs and chemicals ..	5,821	6,586	5,912	8,143	7,444
Wood, wicker and cane ..	1,932	2,058	1,995	3,385	4,729
Jewellery and fancy goods ..	4,052	4,447	4,216	4,699	7,722
Leather and rubber ..	3,892	3,237	2,873	5,182	5,204
Paper and stationery ..	3,153	3,398	3,779	4,264	5,105
Miscellaneous ..	18,633	19,252	19,401	23,510	49,748
Government stores ..	16,997	19,779	16,990	16,555	22,025
Total	221,843	218,016	220,605	269,299	317,815
EXPORTS.					
	£	£	£	£	£
Bêche-de-mer	4,380	6,482	1,643	4,455	1,802
Coffee beans	537	2,404	4,993	7,083	5,217
Copra	100,454	89,512	42,990	57,597	100,681
Coconut, desiccated	50,826	40,514	18,000	37,895	42,407
Gold	34,338	45,383	45,933	68,922	81,034
Pearls .. ..	..	1,480	2,505	5,742	2,395
Rubber	49,262	56,929	61,324	79,031	89,467
Trochus shell	8,510	9,619	16,922	11,750	13,609
Other	11,947	14,543	24,825	22,268	18,485
Total	269,254	275,866	249,135	294,743	355,157

The trade of the Territory reached its maximum in 1925-26 when imports were valued at £470,774 and exports at £649,373. Prices for both copra and rubber were high about that time and the copper mines were producing freely.

3. **Direction of Trade.**—Particulars of the countries of origin of the imports into Papua and the destination of the goods shipped therefrom are available for the past two years :—

PAPUA.—DIRECTION OF TRADE.

Country.	Imports.		Exports.	
	1934-35.	1935-36.	1934-35.	1935-36.
	£	£	£	£
Australia	134,450	145,534	226,662	254,132
United Kingdom	40,156	53,070	7,456	45,329
Other British	13,510	13,317	10,448	6,025
Europe	7,792	6,985	34,998	38,291
Japan	10,185	9,104	10,576	10,558
Asia, excluding Japan	17,759	22,844	3,487	675
Dutch East Indies and Philippine Islands	6,803	11,320	..	147
United States of America	38,644	54,406	1,116	..
America, Other .. .. .	..	635	..	..
Total	269,299	317,815	294,743	355,157

§ 7: Finance and Shipping.

1. **Finance.**—The revenue and expenditure for the last five years were as follows :—

PAPUA.—REVENUE AND EXPENDITURE.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Revenue—					
Customs	39,168	37,953	35,551	43,428	46,132
Commonwealth Grant	40,000	34,000	40,000	42,500	42,500
Lands	5,523	5,699	5,376	5,319	5,177
Fees, fines, etc.	5,210	4,657	4,873	6,199	5,600
Other	40,215	45,634	35,348	(a) 55,165	(a) 60,279
Total	130,116	127,043	121,148	152,611	165,688
Expenditure—					
Medical	15,517	14,166	13,759	13,398	16,203
Ordinary Votes	93,000	96,065	90,610	(b) 120,723	(b) 129,282
Public Works	17,434	15,370	14,335	15,504	17,597
Native Affairs	2,731	2,820	2,784	2,848	2,739
Total	128,682	128,421	121,488	152,473	165,821

(a) Includes Commonwealth grant to rubber growers £19,023 in 1934-35 and £19,747 in 1935-36, and Commonwealth grant for mining development, £5,000 in 1935-36. (b) Includes expenditure of Commonwealth special grants.

2. **Shipping.**—The following table shows the number and tonnage of overseas vessels entered and cleared at ports during the years 1930-31 to 1935-36. All the vessels recorded in 1935-36 except 27 were of British nationality.

PAPUA.—OVERSEA SHIPPING.

Year.	Vessels.	Tonnage.
1930-31	171	220,399
1931-32	185	333,304
1932-33	170	398,451
1933-34	168	373,895
1934-35	177	341,537
1935-36	194	371,980

Throughout, the figures are exclusive of ships of war and Government vessels.

§ 8. Progress of Papua.

As already stated in § 1, *supra* the Territory was placed under the Commonwealth control on 1st September, 1906. The following table indicates the progress that has been made since that date :—

PAPUA.—STATISTICAL SUMMARY.

Items.	Year ended 30th June—		
	1907.	1935.	1936.
White population	690	1,229	1,203
Native labourers employed	2,000	12,558	14,268
Territorial revenue	£21,813	£91,089	£98,442
„ expenditure	£45,335	£133,451	£141,074
Value of imports	£87,776	£269,299	£317,815
„ exports	£63,756	£294,743	£355,157
Area of plantations acres	(a) 1,467	(a) 59,446	(a) 58,628
Meteorological stations established	3	20	20
Gold yield fine ounces	12,439	16,136	19,254

(a) 31st December, previous year.

MANDATED TERRITORY OF NEW GUINEA.

§ 1. General Description.

The land area of the Territory of New Guinea is about 93,000 square miles and the area including the sea within the lines drawn through its extreme outer points is more than 1,000,000 square miles. The coast of the Territory not having been completely surveyed, the areas of the various islands are known only approximately.

The approximate areas of the principal islands together with the small islands adjacent thereto are as follows :—

AREA OF TERRITORY OF NEW GUINEA.

Particulars.	Approximate Area.
North East New Guinea (also called "The Mainland")	Square Miles.
Bismarck Archipelago—	60,700
New Britain	14,600
New Ireland	3,340
Lavongai	460
Admiralty Islands	800
Solomon Islands—	19,200
Bougainville	3,880
Buka	220
Total	4,100
	93,000

Information regarding physiography and climate will be found in Official Year Book, No. 22, p. 613, and in the Official Handbook of the Territory.

§ 2. Government.

1. **The Military Occupation.**—On the 17th September, 1914, the Acting Governor of German New Guinea signed terms of capitulation with the officer commanding a Naval and Military Expedition sent from Australia, and thereafter the Territory was under military administration until the establishment of Civil Government in May, 1921.

2. **Mandate.**—In 1919 it was decided by the Principal Allied and Associated Powers that the Territory of New Guinea, which Germany gave up as one of the terms of peace, should be entrusted under Mandate from the League of Nations to the Government of the Commonwealth. The issuing of the Mandate was, however, delayed, and it was not until 17th December, 1920, that its terms were settled; and the Mandate itself did not reach Australia until April, 1921.

The terms of the Mandate are given hereunder :—

THE COUNCIL OF THE LEAGUE OF NATIONS :—

Whereas by Article 119 of the Treaty of Peace with Germany signed at Versailles on 28th June, 1919, Germany renounced in favour of the Principal Allied and Associated Powers all her rights over her oversea possessions, including therein German New Guinea and the groups of islands in the Pacific Ocean lying south of the Equator other than German Samoa and Nauru; and

Whereas the Principal Allied and Associated Powers agreed that in accordance with Article 22, Part I. (Covenant of the League of Nations), of the said Treaty, a Mandate should be conferred upon His Britannic Majesty to be exercised on his behalf by the Government of the Commonwealth of Australia to administer New Guinea and the said islands, and have proposed that the Mandate should be formulated in the following terms; and

Whereas His Britannic Majesty, for and on behalf of the Government of the Commonwealth of Australia, has agreed to accept the Mandate in respect of the said territory and has undertaken to exercise it on behalf of the League of Nations in accordance with the following provisions; and

Whereas, by the aforementioned Article 22, paragraph 8, it is provided that the degree of authority, control or administration to be exercised by the Mandatory not having been previously agreed upon by the members of the League, shall be explicitly defined by the Council of the League of Nations;

Confirming the said Mandate, defines its terms as follows :—

ARTICLE 1.

The territory over which a Mandate is conferred upon His Britannic Majesty for and on behalf of the Government of the Commonwealth of Australia (hereinafter called the Mandatory) comprises the former German Colony of New Guinea and the former German islands situated in the Pacific Ocean and lying south of the Equator, other than the islands of the Samoan group and the island of Nauru.

ARTICLE 2.

The Mandatory shall have full power of administration and legislation over the territory subject to the present Mandate as an integral portion of the Commonwealth of Australia, and may apply the laws of the Commonwealth of Australia to the territory, subject to such local modifications as circumstances may require.

The Mandatory shall promote to the utmost the material and moral well-being and the social progress of the inhabitants of the territory subject to the present Mandate.

ARTICLE 3.

The Mandatory shall see that the slave trade is prohibited, and that no forced labour is permitted, except for essential public works and services, and then only for adequate remuneration.

The Mandatory shall also see that the traffic in arms and ammunition is controlled in accordance with principles analogous to those laid down in the Convention relating to the control of the arms traffic, signed on 10th September, 1919, or in any convention amending the same.

The supply of intoxicating spirits and beverages to the natives shall be prohibited.

ARTICLE 4.

The military training of the natives, otherwise than for purposes of internal police and the local defence of the territory, shall be prohibited. Furthermore, no military or naval bases shall be established or fortifications erected in the territory.

ARTICLE 5.

Subject to the provisions of any local law for the maintenance of public order and public morals, the Mandatory shall ensure in the territory freedom of conscience and the free exercise of all forms of worship, and shall allow all missionaries, nationals of any State Member of the League of Nations, to enter into, travel and reside in the territory for the purpose of prosecuting their calling.

ARTICLE 6.

The Mandatory shall make to the Council of the League of Nations an annual report to the satisfaction of the Council, containing full information with regard to the territory, and indicating the measures taken to carry out the obligations assumed under Articles 2, 3, 4, and 5:

ARTICLE 7.

The consent of the Council of the League of Nations is required for any modification of the terms of the present Mandate.

The Mandatory agrees that if any dispute whatever should arise between the Mandatory and another Member of the League of Nations relating to the interpretation or the application of the provisions of the Mandate, such dispute, if it cannot be settled by negotiation, shall be submitted to the Permanent Court of International Justice provided for by Article 14 of the Covenant of the League of Nations.

The present Declaration shall be deposited in the archives of the League of Nations. Certified copies shall be forwarded by the Secretary-General of the League of Nations to all Powers Signatories of the Treaty of Peace with Germany.

Made at Geneva the 17th day of December, 1920.

3. **New Guinea Act and Statute Law.**—In anticipation of the issuing of the Mandate the Commonwealth Parliament in September, 1920, passed the New Guinea Act 1920, by which the Governor-General was authorized to accept the Mandate when issued. The Territory was, by the Act, declared to be a Territory under the authority of the Commonwealth, with the name of the Territory of New Guinea.

The Act provided for an Administrator, while power to legislate for the Territory was to be exercised by the Governor-General, and provision was made for the observance of safeguards in the interests of the natives as set out in the Mandate.

In 1932 the Act was amended to provide for the establishment of a Legislative Council and an Executive Council for the Territory, the Executive Council to consist of nine members appointed by the Governor-General of whom one shall not be an officer of the Territory. The Legislative Council is empowered to make Ordinances for the peace, order and good government of the Territory. Such Ordinances are subject to disallowance by the Governor-General who, however, is not now empowered to make Ordinances for the Territory. The Amending Act was proclaimed to commence on 2nd May, 1933, and the Act is now entitled the New Guinea Act 1920-1935. The Acts of the Commonwealth Parliament do not (unless expressly so stated) extend to the Territory, but the Laws Repeal and Adopting Ordinance 1921-1937 provides that certain Acts and Ordinances shall be applied thereto.

4. **Legislative Council.**—The Legislative Council consists of the Administrator, the eight official members of the Executive Council and seven non-official members, the latter nominated by the Administrator and appointed by the Governor-General.

5. **Expropriation.**—The Treaty of Peace provided that German nationals resident in her former colonies might be repatriated, and that the property rights and interests of German nationals in former colonies might be retained and liquidated by the Allies, the proceeds being credited to Germany in part payment of the reparation payable by her under the Treaty. In pursuance of these powers, in September, 1920, the property of the principal German companies in the Territory, and in March, 1921, that of a large number of German planters, was vested in the Public Trustee. In 1926 and 1927 these plantations were transferred to private owners.

6. **Departments and Districts.**—The Administration is organized in eight Departments—Government Secretary; Treasury; District Services and Native Affairs; Public Health; Customs; Lands, Surveys, Mines and Forests; Agriculture; and Public Works.

For administrative purposes the Territory is divided into the seven following districts:—New Britain, comprising New Britain and adjacent islands; Morobe; Madang; Sepik (on the mainland); New Ireland, comprising New Ireland, Lavongai and adjacent islands; Manus, comprising the Admiralty Group; and Kieta, the former German portion of the Solomon Islands. Each district is under a District Officer, assisted by a small staff.

7. **Reports to the League of Nations.**—Sixteen reports have been rendered to the League of Nations in compliance with Article 6 of the Mandate, the latest being for the year ended 30th June, 1936.

§ 3. Population.

1. **White Population.**—The number of the white population at various intervals since 1885 is shown in the following table. At the 30th June, 1936, the white population was 4,280, of whom 3,332 were British subjects.

TERRITORY OF NEW GUINEA.—WHITE POPULATION.

Year.				Number.	Year.				Number.
1885	..	..	..	64	1933	..	..	..	3,191
1930	..	..	..	2,850	1935	..	..	..	4,176
1931	..	..	..	2,900	1936	..	..	..	4,280
1932	..	..	..	3,100					

2. **Asiatic Population.**—Malays seem to have been the first Asiatics brought by the Germans to German New Guinea; 37 of them were recorded on the mainland in 1885.

About 1889 the New Guinea Company began to bring Chinese, Malays and Javanese in growing numbers from Singapore and Java to work on the plantations; in the year 1892 there were about 1,800 Asiatics on the mainland. By 1898 the number had decreased to 300 or 400, but it had risen to 1,830 at the time of the Census in 1933 and now numbers 1,601, of whom the greater majority are Chinese. The Japanese at the 1933 Census numbered 73. The Chinese provide the skilled artisans of the Territory, and many of them are small traders. Most of the Japanese residents are employed on the plantations, or in shipyards and stores.

3. *Native Population.*—As a large portion of the Territory is not under Government influence it is not possible to obtain reliable figures in regard to the number of the natives.

The following table shows the number enumerated as at 30th June, 1936:—

TERRITORY OF NEW GUINEA.—NATIVE POPULATION, ENUMERATED 30th JUNE, 1936 (INCLUSIVE OF INDENTURED LABOURERS).

District.	Children.			Adults.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Kieta ..	8,461	7,309	15,770	15,217	12,826	28,043	23,678	20,135	43,813
Madang ..	14,821	12,494	27,315	22,870	20,218	43,088	37,601	32,712	70,303
Manus ..	2,870	2,423	5,293	5,159	4,167	9,326	8,029	5,890	14,919
Morobe ..	27,207	24,126	51,333	43,185	36,478	79,663	70,302	60,004	130,906
New Britain ..	19,476	17,157	36,633	33,958	20,085	54,043	53,434	43,242	96,676
New Ireland ..	7,183	6,245	13,428	17,528	12,155	29,683	24,711	18,400	43,111
Sepik ..	22,805	18,801	41,606	29,612	28,904	58,516	52,417	47,705	100,122
Total ..	102,823	88,555	191,378	167,529	141,133	308,662	270,352	229,688	500,040

The total native population of New Guinea is estimated roughly at about 666,000. Whether the number is increasing or decreasing cannot be ascertained with certainty. The number of natives indentured as labourers, mostly for plantation work, on 30th June, 1936, was 36,927, compared with 33,993 in the previous year.

§ 4. The Natives.

1. *General.*—The natives are divided into two main groups—Melanesian and Papuan—the former, with a few exceptions, constitute the population of the Bismarck Archipelago, the Solomon Islands, and of the coastal districts of the New Guinea mainland, while the latter inhabit the interior of the mainland. Odd tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and, possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (*See Official Year Book, No. 16, p. 670, and Official Handbook of the Territory, Pt. V.*)

2. *Land Tenure.*—Native customs in regard to the ownership and use of land may be briefly outlined as follows—The ownership and use of the land are generally individual, although, in some rare cases, particularly in North Bougainville, the communal system exists. In districts where a great many coconut palms are growing on native lands it is often found that the land is the property of a chief or of one of the old men of the tribe, and that the coconut palms growing thereon are divided into small groves, and are the property of several members of the tribe. Customs with regard to the use of unoccupied forest lands vary. Right of inheritance to land is almost invariably through the maternal branch. (*See Official Year Book No. 17, p. 634, and Official Handbook of the Territory.*)

3. **Research Work.**—During the German occupation of the Territory a certain amount of research work was carried out, partly by scientific expeditions, and partly by missionaries and by a local resident. An anthropologist is engaged consolidating the work already done, and extending it throughout the Territory. The results of his work appear in special reports.

4. **Education.**—The education of the natives is provided for in the Education Ordinance of 1922-1933 under which the Administrator is authorized to establish schools, grant money therefor, prescribe instruction, and arrange for the training of teachers and other matters. The expenditure on native education in 1935-36 was £5,777. Though the natives are liable to pay education tax, none has been collected since 1922-23. The European teachers have been seconded from the Education Department of Queensland. During the year ended 30th June, 1936, the following schools were maintained by the Administration:—Native elementary schools and native day schools, Malaguna and Nodup, near Rabaul, and Kavieng; native technical school, Malaguna; native agricultural school, Keravat. In addition there are schools for Europeans at Rabaul, Kavieng and Wan.

A considerable amount of educational work is carried out by the missions, the schools maintained being of three classes: (a) elementary schools in villages; (b) intermediate boarding schools at headquarters; and (c) high schools and technical schools. At the end of June, 1936, the various missions maintained 30 training centres, 62 high and technical schools, 137 elementary schools, and 2,082 village schools. The pupils numbered 60,387.

The missions also conduct schools for Chinese children in Rabaul and Kavieng.

The granting of assistance to mission schools is provided for by the Education Ordinance, but no grants have hitherto been made.

5. **Health of Natives.**—In a report dealing with the health of the natives in New Britain submitted before the war, it was stated that "the natives in the districts examined are not degenerate; but they are sick." The same qualification undoubtedly applies to the native population throughout the Territory.

The diseases taking the greatest toll of native life directly or through lowering vitality are:—Malaria, respiratory diseases, dysentery, frambesia, yaws, tropical ulcer, hookworm, filariasis and beriberi.

The Health Department in Rabaul consists of:—(i) a staff of medical officers and orderlies, including travelling doctors; (ii) native hospitals at Government stations and sub-stations (its staff also supervises hospitals on plantations); (iii) a laboratory; (iv) training system for natives as medical orderlies; (v) scheme of distribution of medical necessities; and (vi) two leper-stations. It also undertakes the general oversight of sanitary conditions. The first Infant Welfare Centre in the Territory was opened in Malabunga in August, 1931.

6. **Missions.**—Several mission societies are operating in the Territory. The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost along the coast of North-East New Guinea from Sek to the Dutch border, the Marists in Buka and Bougainville. These are Roman Catholic Missions. The Protestant Missions are the Australian Methodist Mission in New Britain and New Ireland, the New Zealand Methodist Mission in Bougainville, the Liebenzell Mission in the Admiralty Group, the Lutheran Mission (supported and staffed by the Lutheran Churches in Australia and America), which works along the coast of North-East New Guinea from Sek to the Papuan border, the Melanesian Mission (Anglican) in New Britain, and the Seventh Day Adventist Mission in Bougainville and New Britain. All these societies combine teaching and planting with their missionary work.

§ 5. Land Policy.

1. **Acquisition of Land.**—A short account of the modes of acquiring land appears in Official Year Book No. 19, p. 590, but considerations of space preclude its repetition.

2. **Land Policy of the Present Administration.**—The Land Ordinance 1922-1937 provides for sale as well as leasing of land belonging to the Administration. The divergence from the policy usually adopted by the British in the Pacific (including Papua), which provides for leasehold only, was made with a view to disposal by sale of the freehold properties taken over from Germans, and which until 1927 were controlled by the Expropriation Board. The general land policy of the Administration is based on the leasehold principle. All Administration grants or leases contain a reservation to the Administration of all minerals, including mineral oil. Leases are for a term of 99 years except where a shorter period is provided. Administration lands, except in towns, are classified by a Land Board into land suitable for agriculture (Class A) and land not so suitable (Class B), and the unimproved value of the land is assessed. In the case of agricultural leases for more than 30 years the rent is 5 per cent. of the unimproved value, with power to remit during the first ten years, and subject to reappraisal every 20 years. Pastoral leases of lands of Class B may be granted for terms not exceeding 30 years, at a rental of $2\frac{1}{2}$ per cent. of the unimproved value, subject to reappraisal every 10 years.

Agricultural leases are subject to improvement conditions and pastoral leases to stocking conditions. Leases of town allotments may be granted for terms not exceeding 99 years, at a rent to be fixed at such percentage of the unimproved value as is prescribed.

A total area of 290,475 hectares (about 726,188 acres) had been alienated up to the 30th June, 1936. The area alienated in 1935-36 was 4,543 hectares (about 11,358 acres).

3. **Registration of Titles.**—Under German law there was a system of registration of titles in a "Ground Book," but registration did not confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in an Ordinance entitled the Lands Registration Ordinance 1924-1937.

§ 6. Production.

1. **General.**—The natives have been described as a people of peasant proprietors, practising a crude form of agriculture. Their gardens and groves furnish but a small amount of produce for oversea trade, and the exports of the Territory grew only as European plantations were made, and natives were employed to work them. In recent years scientific methods of cultivation have been adopted, and production has been greatly increased thereby. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and imported direct to Australia for home consumption.

2. **Agriculture.**—(i) *General.* Under the supervision of the Director of Agriculture soil analysis has been undertaken in different parts of the Territory. A demonstration plantation has been established at Keravat where natives are being trained in tropical agriculture. A laboratory and a herbarium have been established, an entomologist and economic botanist engaged, and travelling inspectors appointed for the purpose of combating plant pests. Experiments are being carried on with a variety of crops. The foregoing measures, in conjunction with the Papua and New Guinea Bounties Act 1926 and the preference given by the Commonwealth Tariff to certain produce grown in the Territories, have greatly stimulated tropical agriculture.

(a) *Coconuts*. Coconut-growing is by far the most important industry in the Territory, but the low price of copra during the past few years has checked expansion. The price rose sharply during 1935-36 and the exports of copra advanced from £361,413 to £761,309, with an increase in quantity of 10,433 tons.

(b) *Tobacco*. Many planters are cultivating tobacco to cater for the local market. Two companies have manufactured tobacco suitable for issue to the natives or for trade. In some instances planters are issuing the dry leaf to the native labour who make their own cigars and cigarettes.

(c) *Cotton*. In 1924-25 the Government obtained 1,615 lb. of cotton seed, and cultivation was tried at the experimental stations as well as by private planters, including a few natives, but little progress has been made.

(d) *Kapok*. The cultivation of kapok was continued on a small scale. The local demand is more than sufficient to absorb the available crop.

(e) *Cocoa*. Greater interest is being displayed in the cultivation of cocoa. The quality of the beans produced is good, and 127 tons, or an increase of 32 tons over the previous year's figures, were exported during the year.

(f) *Desiccated Coconut*. Three desiccated coconut factories are established in the Territory. The quantity exported during 1935-36 was 1,647 tons, being 36 tons in excess of the previous year.

(g) *Coffee*. Two plantations of coffee are in satisfactory condition and are commencing to yield. Eleven tons of coffee valued at £880 were exported during the year. The coffee is of good quality and is well received on the Australian market.

(h) *Other Crops*. The climate and soil of New Guinea are suitable for the cultivation of rice, Manila hemp, cinchona, nutmeg, vanilla, peanuts and maize, but hitherto their cultivation has either not advanced beyond the experimental stage or has been attempted on a small scale only. Sugar-cane of many varieties flourishes, and the natives cultivate extensive areas for their own use; other indigenous food-producing plants include the sago palm and the cassava.

(i) *Plants Yielding Power Alcohol*. It seems probable that alcohol for power purposes will be obtainable economically from the Territory. The sago palm and nipa palm yield as much as 60 gallons a ton, and in places are abundant.

(ii) *Plantations*. During the year 1934-35 the Administration disposed of the several plantations maintained by it with the exception of the demonstration plantation at Keravat. The principal crops grown on plantations are shown in the table hereunder for the year ended 30th June, 1936. The figures are exclusive of native plantations, but include 2,784 acres of interplanted crops.

TERRITORY OF NEW GUINEA.—PLANTATIONS, 1935-36.

Crop.			Area Planted.	Area Bearing.	Yield.
			Acres.	Acres.	Tons.
Coconuts .. ..	..	..	229,227	184,628	62,281
Cocoa .. ..	..	..	3,267	1,483	119
Coffee .. ..	..	..	1,245	222	22
Rubber .. ..	..	..	1,954	..	..
Kapok .. ..	..	..	808	193	4
Native Food (a) ..	..	..	2,076	1,228	1,850
Other .. ..	..	..	1,290	274	..
Total .. ..	..	..	239,867	188,028	..

(a) Native food of all kinds is mostly grown between young coconut palms not yet in bearing.

The area of plantations at various periods from 1885 to 1936 is shown hereunder. As in the case of the previous table, the figures are exclusive of native plantations :—

TERRITORY OF NEW GUINEA.—PLANTATIONS.

Year ended June.				Total Area.	Area Planted.	Area under Coconuts (including Area not in Bearing).
				Acres.	Acres.	Acres.
1885	..	..	..	148	(b)	(a)
1895	..	..	..	2,152	(b)	(a)
1911	..	..	..	58,837	(b)	51,510
1914	..	..	..	84,488	(b)	76,847
1924	..	..	..	411,275	(b)	172,373
1932	..	..	..	460,942	216,730	211,882
1933	..	..	..	514,250	219,490	214,290
1934	..	..	..	486,404	218,648	210,849
1935	..	..	..	473,260	227,697	218,779
1936	..	..	..	484,358	239,867	229,227

(a) Not recorded.

(b) Not available.

3. **Live Stock.**—The coconut plantations are now of a sufficient area to maintain numerous live stock, the stock being depastured on the indigenous grasses growing between the rows of palms. In 1935–36 there were 911 horses, 17,436 cattle, 2,188 sheep, 9,538 goats, and 6,262 pigs (exclusive of the large number of pigs kept by the natives).

4. **Timber.**—An investigation of the timber resources has been made by the Commonwealth Inspector-General of Forests, and a report in connexion therewith was published in 1926. According to this report, while offering no prospects of immediate gain to large saw-milling interests, the Territory possesses forest potentialities of a high order. The timber required for house and shipbuilding and for other purposes is mostly obtained locally. In North-East New Guinea the Lutheran Mission and the Holy Ghost Mission both possess up-to-date saw-milling plants, while most of the timber required in the Archipelago is supplied by the Sacred Heart Mission's saw-mill and three privately owned mills in New Britain. The timber required for the gold-fields is produced locally.

The Forestry Ordinance 1936 provides for the issue of permits and licences to cut timber. Timber growing on native lands cannot be acquired by private purchasers directly from the natives, but must be obtained through the Administration. A royalty is payable on all forest produce taken under a permit or licence. Twenty-six timber permits were issued during the year 1935–36, of which twelve were for areas on the Morobe gold-field, where nine saw-mills were in operation supplying timber for building and mining purposes throughout the gold-field.

5. **Fisheries.**—The wealth of the waters of the Territory has so far been little exploited. Fish is caught at many places along the coast to supply the small local demand of the natives and of the few resident Europeans. Pearl-shell is exported in fair quantities, while *bêche-de-mer*, trochus-shell and tortoise-shell also figure amongst the exports. The value of marine products exported in 1935–36 was £29,595, compared with £25,915 in the previous year.

6. **Mining.**—Except for gold there has been little mining in New Guinea, and knowledge of the mineral resources is as yet but scanty. Gold has been discovered on the Waria, the Ramu, the Francisco, and the Markham Rivers, etc. Rich gold was discovered in the Morobe District in 1926; the field is situated about 60 miles (35 by air) inland from Salamaua, the nearest coastal port. Communication has been established with the coast by a regular aeroplane service. Osmiridium is reported to have been

found on the upper tributaries of the Ramu, and platinum on the Kabenau River. Copper has been discovered in the form of chalcopyrite and malachite in the Baining District. Iron occurs as magnesite and hematite in the Baining District, apparently in large quantities. Sulphur occurs in several localities in the volcanic regions of the Territory. Brown coal has been found on the mainland in the vicinity of Astrolabe Bay, and in the southern portion of New Ireland.

Mining is regulated by the Mining Ordinance 1928-1936. Copies of the Ordinance and Regulations made thereunder may be obtained from the Secretary, Prime Minister's Department, Canberra, or the Administrator, Rabaul.

The following table shows the production of gold during the past five years:—

TERRITORY OF NEW GUINEA.—GOLD PRODUCTION.

Year.					Quantity.	Value. (a)
					Fine oz.	£
1931-32	..	..	..	..	63,485	429,686
1932-33	..	..	..	..	121,913	913,492
1933-34	..	..	..	..	155,000	1,260,000
1934-35	..	..	..	..	180,000	1,569,000
1935-36	..	..	..	..	182,000	1,580,000

(a) Valued at average price realized for fine gold in Australia.

Since the high market price of gold has been maintained, the search for profitable areas in various parts of the Territory has not diminished and systematic testing by drilling and other means has been undertaken on alluvial areas previously considered unworthy of attention. Although there were no new discoveries of reef gold during the year alluvial gold was found in the Wampit River valley in the Morobe district, but the payable ground proved to be limited and only a few miners remained to work out the ground available.

Under the Petroleum Ordinance 1936, private companies incorporated or registered in the Territory, two-thirds of whose shares are held by British subjects, are eligible to engage in prospecting and mining for mineral oil and coal. On the 30th June, 1935, two licences to search for mineral oil were in force.

§ 7. Trade.

1. **Customs Tariff.**—With the exception of heavy revenue rates on ale, spirits, beverages and tobacco and a duty of 3d. per gallon on petrol, kerosene and lubricating oil, the tariff of the Territory of New Guinea is generally on a 10 per cent. *ad valorem* basis. Only 55 items are mentioned in the import schedule, of which approximately 32 are on the free list consisting of articles for use by the Administrator, the Trade Commissioners and the Missions, medical supplies, live stock, meat, fish, fresh fruit, vegetables and certain essential manufactures for use in the Territory. The rate of duty for the remaining items as well as for all other goods not mentioned in the schedule is 10 per cent. *ad valorem*. No preferential tariff rates are provided in the schedule.

Export duties are levied on copra, trepang, shell, feathers and sulphur. When the price, or the assessed value of copra is less than £5 15s. per ton no tariff is imposed, but when the price exceeds this figure up to £11 per ton 2s. 6d. per ton is charged, which increases on a sliding scale to 11s. 6d. per ton as the price rises to £18, with an additional 2s. per ton for every further increase of £1 in the price of copra. Excluding specie the imports in 1935-36 amounted to £1,290,788 on which £185,793 was received in import duties, while £10,276 was paid in export duties and royalties.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1935 for the free entry into Australia of certain goods produced and imported

direct from the Territory of New Guinea (*see* Chapter XVI. § 2 par. 4 (iii)), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Values of the principal items of imports and exports for the last five years are shown hereunder. The values of exports are expressed in Australian currency, but it is not possible to accurately determine the meaning of the £ in the table of imports :—

TERRITORY OF NEW GUINEA.—IMPORTS AND EXPORTS.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
IMPORTS.					
	£	£	£	£	£
Foodstuffs of animal origin ..	77,528	89,692	88,011	94,417	127,110
Foodstuffs of vegetable origin ..	96,891	115,905	108,992	121,146	159,287
Spirituuous and alcoholic liquors ..	34,760	38,763	39,757	44,215	50,665
Tobacco and preparations thereof	49,090	51,841	43,743	38,777	53,213
Live animals	1,497	1,391	1,287	1,630	1,617
Animal substances	107	255	276	223	636
Vegetable substances and fibres	3,421	3,323	3,018	2,355	3,884
Apparel, textiles and manufac- tured fibres.. ..	106,218	123,657	106,022	117,670	171,092
Oils, fats and waxes	35,082	47,111	52,867	41,374	72,956
Paints and varnishes	7,551	10,312	6,736	10,472	13,599
Stones and minerals	17,794	14,064	11,955	8,741	12,291
Metals, manufactures and mach- inery	246,376	284,923	337,920	312,218	426,007
Rubber and leather and manu- factures	6,178	7,868	6,899	12,028	15,222
Wood and wicker	17,076	16,806	15,686	13,650	26,279
Earthenware, cement, glass, etc.	5,563	7,351	9,739	18,236	13,897
Paper and stationery	12,419	15,951	14,259	16,777	23,583
Jewellery and fancy goods ..	7,291	8,571	11,829	11,014	12,764
Optical and scientific instruments	10,508	15,389	11,937	17,521	22,019
Drugs, chemicals and fertilizers ..	20,819	29,884	25,580	30,905	38,716
Miscellaneous	23,228	29,368	27,803	35,035	45,051
Specie	1,700	6,790	8,500	4,589	133,600
Total	781,097	919,155	932,816	952,993	1,424,388
EXPORTS.					
	£	£	£	£	£
Copra	618,298	543,906	283,329	361,413	761,309
Cocoa	3,060	2,292	3,479	3,479	3,810
Stone and ivory nuts	280	131	500	186	552
Trepang	4,960	3,900	4,400	5,800	5,025
Shell (trochus, etc.)	15,170	17,585	20,482	20,115	24,570
Tortoise shell	89	48	88	82	103
Gold	398,939	933,910	1,367,616	1,897,244	1,704,498
Desiccated coconut	64,100	73,452	81,562	45,080	65,880
Miscellaneous	3,723	6,018	4,676	7,225	7,504
Total	1,108,619	1,581,272	1,766,198	2,340,624	2,573,251

3. **Direction of Trade.**—Particulars of the countries of origin of the imports into the Territory of New Guinea and the destination of the goods shipped therefrom during the past three years are as follows:—

TERRITORY OF NEW GUINEA—DIRECTION OF TRADE.

Country.	Imports.			Exports.		
	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£	£
Australia ..	383,853	433,309	675,652	1,501,378	2,009,162	1,950,240
United Kingdom	110,711	130,527	184,821	30,776	116,183	264,213
Other British ..	7,907	8,996	61,927	..	..	520
China ..	43,213	40,244	49,553	4,804	5,914	5,599
Japan ..	25,369	42,757	76,030	7,783	9,839	12,035
France ..	3,959	3,944	5,632	66,755	32,349	44,951
Germany ..	55,784	47,218	54,441	52,166	45,941	98,261
United States of America ..	196,557	135,299	204,608	20	..	5
Other ..	105,463	110,699	111,724	102,516	121,236	197,427
Total ..	932,816	952,993	1,424,388	1,766,198	2,340,624	2,573,251

The bulk of the imports into the Territory of foodstuffs, beer, coal, boats, launches and soap comes from Australia, which also supplies large quantities of machinery and metal manufactures, drugs, explosives, tobacco, cigarettes, apparel, boots, paints, leather manufactures, timber, stationery and polishes.

The principal export from the Territory to Australia is gold which comes for refinement and reshipment abroad. Copra in excess of requirements also comes to Australia for sale and reshipment overseas.

§ 8. Shipping and Communication.

1. **General.**—A subsidized mail service between New Guinea and Australia is maintained by Burns, Philp and Co. Ltd. The vessels of the Eastern and Australian Steamship Co., which maintains a regular monthly service between Australia, China and Japan, have included Rabaul as a port of call. The Dutch Royal Packet Navigation Co.'s vessels, which maintain a service between Singapore and Australia, also call at Rabaul, and the Norddeutscher Lloyd has established a regular service between Hong Kong and Rabaul. W. R. Carpenter and Co. Ltd. run a service with two vessels between Europe, Australia and the Territory. Shipping within the Territory is regulated by the Shipping Ordinance 1936 and the Coastal Shipping, Ports, and Harbours Regulations.

2. **Oversea Tonnage in 1935-36.**—The number and net tonnage of oversea vessels which entered and cleared the Territory during the year 1935-36 are shown hereunder:—

TERRITORY OF NEW GUINEA.—SHIPPING, 1935-36.

Nationality.			Vessels Entered.		Vessels Cleared.		Total.	
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
American ..	..	..	1	2,429	1	2,429	2	4,858
British ..	..	..	93	290,606	94	294,217	187	584,823
Dutch ..	..	..	6	10,889	6	10,889	12	21,778
French ..	..	..	1	104	1	104	2	208
German ..	..	..	18	19,824	18	19,824	36	39,648
Japanese ..	..	..	4	4,027	4	4,027	8	8,054
Total ..	..	..	123	327,879	124	331,490	247	659,369

3. **Local Shipping.**—Vessels controlled by Burns, Philp and Co. Ltd. and W. R. Carpenter and Co. Ltd. extend their activities to the inter-island trade, and the vessels of the Norddeutscher Lloyd also call at numerous ports in the Territory.

4. **Land Communication.**—Means of communication on land are scanty. There are no railways. Roads lead from Rabaul to places within 30 or 40 miles, and there is a road 200 miles long in New Ireland. Elsewhere there are few roads outside plantations and the stations of the District Officers. The large rivers of the mainland are as yet but little used.

There is a high power wireless station at Rabaul, and low power installations at the out-stations, including Salamaua and Wau.

5. **Communication by Air.**—The discovery of gold in New Guinea has resulted in great aviation activity in the vicinity of the gold-fields. On account of the mountainous country and dense undergrowth between the coast and the gold-fields the task of transporting food and stores to the fields and of bringing the gold to the seaboard by land is an irksome and costly process. The fields are situated about 60 miles (35 by air) inland from Salamaua, and whereas aircraft cover the distance in approximately an hour, the nature of the country is such that a journey by other means occupies more than a week. During 1931–32 an air service was established between Port Moresby and the gold-fields, reducing the time occupied by the journey from Australia by about seven days. At 30th June, 1936, 39 aeroplanes were operating in the Territory.

§ 9. Revenue and Expenditure.

Details of the revenue collected from various sources and the expenditure during each of the last five years are given hereunder:—

TERRITORY OF NEW GUINEA.—REVENUE.

Particulars.	1931–32.	1932–33.	1933–34.	1934–35.	1935–36
	£	£	£	£	£
Taxation—					
Customs (a)	157,696	153,524	157,343	164,481	207,172
Licences	9,740	10,082	10,551	10,807	10,000
Native Head Tax	23,271	22,009	23,010	19,805	19,641
Stamp duties	6,138	4,373	5,567	8,716	5,689
Postal	27,745	17,413	10,246	11,534	16,333
Lands	12,885	14,046	14,662	14,558	15,485
Mining—					
Royalty on gold	22,731	46,670	67,331	88,233	81,169
Other	13,458	22,923	22,149	27,591	18,996
Fees and fines	18,060	17,745	27,861	20,820	20,342
Sales of stores, etc.	3,900	3,204	3,231	2,215	1,615
Miscellaneous	10,388	9,808	7,706	11,112	13,578
Total	306,072	321,917	350,357	388,171	419,920

EXPENDITURE.

	£	£	£	£	£
Treasury and Audit	35,000	40,730	43,258	33,444	44,851
Agriculture	11,220	11,500	11,801	13,380	14,001
Public Justice	13,098	13,897	17,079	21,839	30,549
Public Health	56,025	60,235	61,527	61,851	68,153
Public Works	13,582	14,408	16,040	17,104	27,200
District Services and Native Affairs	94,033	98,552	108,851	99,318	97,004
New Works	2,950	24,591	30,540	01,806	70,700
Native Welfare	6,582	4,917	7,577	7,202	6,993
Other	46,900	52,587	51,484	51,517	59,533
Total	282,405	321,567	348,817	367,470	425,794

(a) Including harbour dues, wharfrage and storage fees.

NAURU (Mandate).

1. **General.**—Nauru is an oval-shaped atoll about 12 miles in circumference having an area of about 5,400 acres, of which approximately four-fifths is phosphate-bearing. It is situated in long. 166° E., and is 26 miles south of the Equator. Portion of the island between the sandy beach and the coral cliffs is fertile, and it is there that the Nauruans reside. With the exception of a small fringe round an inland lagoon, the plateau which contains the phosphate deposits possesses few food plants and is uninhabited, but portion of the area has been planted with fruit trees. The system of land tenure is governed by an old custom, and, with the exception of small allotments held by the Government, the British Phosphate Commissioners and Missions, the whole of the island is owned by individual natives. The average shade temperature ranges between 72 and 95° F., and the average humidity between 70 and 80. The average rainfall is 85 inches, but droughts occasionally occur, and in 1916 and 1917 only 40 inches were received for the two years. In 1936 the rainfall was 81.30 inches.

2. **History.**—The island, discovered by Captain Fearn in 1798, was annexed by Germany in 1888, and prior to 1914 was part of the protectorate of German New Guinea.

In November, 1914, Nauru was occupied by a detachment from the Australian Naval and Military Expedition at Rabaul, and it was included in the cession of colonies made by Germany in 1919 to the Allied and Associated Powers, whose representatives agreed that a mandate for its administration should be conferred upon His Britannic Majesty. The mandate, which is in similar terms to that for the Territory of New Guinea, was confirmed by the Council of the League of Nations on the 17th December, 1920. On 2nd July, 1919, the British, Australian and New Zealand Governments agreed that the administration of the island (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator who entered on duty in June, 1921. The first Administrator was appointed for a term of five years by the Australian Government; his term of service having expired, it was extended for another five years, but he resigned in 1927. The second Administrator was appointed in June, 1927. The third Administrator was appointed by the Commonwealth of Australia in January, 1933. The Agreement between the three Governments was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is printed in the Schedule to that Act. A supplementary agreement concerning Nauru was drafted in May, 1923, and ratified by the Commonwealth Parliament by the Nauru Island Agreement Act 1932.

3. **Administration.**—The administration of the Island is vested in the Administrator, who is obliged to conform to instructions issued by the Government which appointed him, and all ordinances made by him are subject to confirmation or disallowance by the Governor-General of Australia (for the time being) acting on the advice of the Federal Executive Council. All expenses of administration are met from local revenue. Native industries such as canoe-building, fishing, mat-making, etc., are encouraged by the provision of prizes at annual competitions. An agency of the Commonwealth Savings Bank has been established. There is a co-operative store managed to a large extent by the natives. The books, however, are audited by Government officers. Natives are not allowed to carry or be in possession of firearms, and the use by them of intoxicating liquors and deleterious drugs is prohibited.

4. **Population.**—The population figures on 1st April in each of the years from 1931 to 1935 are given hereunder:—

NAURU.—POPULATION.

Nationality.	1932.	1933.(b)	1934.	1935.	1936.
Europeans	141	165	163	158	179
Chinese	696	936	933	931	1,092
Nauruans (a)	1,475	1,527	1,567	1,603	1,647
Other Pacific Islanders	4	13	14	4	4
Total	2,316	2,641	2,677	2,696	2,922

(a) The natives of Nauru are Micronesians. (b) Census, 30th June, 1933.

Births in 1936 numbered 75 (73 Nauruans, 1 European, and 1 Chinese). There were 16 marriages (15 Nauruans), and 51 deaths (46 Nauruans, 4 Chinese, 1 Pacific Islander).

5. **Health.**—Cases of the usual diseases known in the Pacific occur. Venereal disease is rare, but elephantiasis is occasionally met with. An area has been set apart for the segregation of lepers, and the latest methods of treatment are applied. In 1936, there were 58 lepers in segregation. The treatment and control of leprosy have been very successful. Two hospitals are maintained on the island, one by the Administration for Nauruans, and one by the British Phosphate Commission for its employees. In common with other natives, the Nauruans are very susceptible to tuberculosis and influenza, and in 1921 an influenza epidemic caused the deaths of 230 Islanders. Dysentery, both amœbic and bacillary, is endemic. A regular anti-mosquito campaign is conducted. The usual steps have been taken by the authorities to improve the water supply and to provide efficient sanitation generally. Every Nauruan is required to undergo a medical examination once a month. Baby clinics have been established to give help and advice to Nauruan mothers in regard to infant nurture.

6. **Education.**—On the 1st October, 1923, the Administration took over the education of the Nauruans and other native children, and native schools were established in five districts, and at the leper station. Previously education had been looked after by the Missions subsidized by the Government. A school for European children is presided over by a teacher on loan from the Education Department of Victoria who also supervises educational matters generally. The curriculum is similar to that of corresponding schools in Australia, and the teaching is, as far as possible, wholly in English. Education is compulsory between the ages of six and sixteen. After the termination of ordinary school attendance, twelve months are devoted to technical training. The children in attendance at school in 1936 numbered 28 Europeans and 477 Nauruans. The schools are closed on two afternoons a week in order that the children may attend the classes in religious instruction conducted at the Mission churches. Educational classes for adults have been inaugurated. Units of the Boy Scouts and Girl Guides (Nauruan) have been established on the island.

7. **Judiciary.**—The judicial power is vested in the Administrator in a Central Court and a District Court. The right of appeal is provided.

8. **Religion.**—The London Missionary Society (Protestant) and the Sacred Heart of Jesus Mission (Roman Catholic) operate in Nauru.

9. **Phosphate Deposits.**—(i) *General.* From 1900 to 1910 the deposits were worked by the Pacific Phosphate Company, which also worked the deposits on Ocean Island (about 165 miles east of Nauru and part of the Gilbert and Ellice Islands Colony administered by the Colonial Office). The quantity on Nauru has been estimated at not less than 50,000,000 tons, and the exports average 85 per cent. to 88 per cent. of triacalcium phosphate.

The interests of the Pacific Phosphate Company in the two islands (though not in other islands in the Pacific in which it has workings) were bought by the British, Australian and New Zealand Governments in 1919 for £3,500,000, the purchase money being contributed in the proportions of 42, 42, and 16 per cent. respectively. The Agreement of 2nd July, 1919, provides for the working of the deposits by the British Phosphate Commission of three members, one appointed by each Government; and the three countries are to receive the output in the same proportions of 42, 42, and 16 per cent.

(ii) *Royalty on Phosphate.* In an agreement entered into between the British Phosphate Commissioners and the Nauruan landowners in 1927 provision was made, *inter alia*, for the payment of a royalty of 7½d. per ton of phosphate exported, of which—

(a) 4d. per ton is paid to the Nauruan landowner concerned;

(b) 1½d. per ton to the Administrator for the benefit of the Nauruan people;

- (c) 2d. per ton to the Administrator to be held in trust for the Nauruan landowner concerned and invested at compound interest for a period of 20 years. The capital will then remain invested and the interest thereon will be paid to the landowner.

The rates specified above are to have effect for a period not exceeding 20 years on and from 1st July, 1927, but the royalty of 4d. per ton to the Nauruan landowners is subject to adjustment for the second, third and fourth five-yearly period by increasing or decreasing it pro-rata to any increase or decrease of the export price of phosphate. The royalty for the second five-yearly period was increased to 4½d. per ton.

(iii) *Nauru and Ocean Island Phosphate Industry.*—The following table gives particulars regarding exports of phosphate during the last five years :—

NAURU AND OCEAN ISLAND.—EXPORTS OF PHOSPHATE.

Year.			Total.	To Australia.	To New Zealand.
			Tons.	Per cent.	Per cent.
1931-32	..	..	434,858	63.30	33.90
1932-33	..	..	664,550	66.30	27.09
1933-34	..	..	556,802	63.83	26.97
1934-35	..	..	694,726	61.14	30.43
1935-36	..	..	831,847	67.34	23.94

From Nauru alone during the calendar year 1936 the export was 547,400 tons.

(iv) *Accounts of Commission.* A statement for the five years ended June, 1936, is given hereunder :—

NAURU AND OCEAN ISLAND.—SALES OF PHOSPHATE.

Heading.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Receipts from Sales, etc. ..	599,727	882,277	684,409	769,483	835,148
F.o.b. cost, including interest on capital, sinking fund, etc.	599,209	876,898	610,239	758,845	828,818

The amount due by the British Phosphate Commission to the partner Governments for purchase money and other capital sums was £3,666,457 on 30th June, 1921, and at 30th June, 1936, this had been reduced to £3,219,232. The f.o.b. cost in 1935-36 includes a sum of £224,053 consisting of interest at 6 per cent. upon the purchase price and a contribution to a sinking fund for the redemption of the capital debt in 50 years. The redemption fund now totals £312,268.

(v) *Employees.* Apart from a limited number of Europeans and a few Pacific Islanders, the employees are Chinese engaged under a three years' contract. A few Nauruans are employed occasionally.

10. *Trade.*—In the Schedule to the Customs Tariff of Nauru the highest rates of duty are levied on beer, spirits, tobacco and vehicles. The Schedule contains a fairly extensive free list, and all other goods not included in the free list are dutiable at 10 per cent. ad valorem. An export duty of 10s. per ton is levied on copra.

The British Phosphate Commissioners enjoy freedom from Customs duty for the materials and appliances serving for the exploitation of the phosphate, as well as for the provisions imported by the Commissioners for the feeding of the employees and

workmen engaged therein. The Tariff rates apply to all countries alike. Information regarding imports and exports for the years 1932 to 1936 is appended :—

NAURU.—IMPORTS AND EXPORTS.

Heading.	Year ended 31st December—				
	1932.	1933.	1934.	1935.	1936
	£	£	£	£	£
Imports	95,739	97,684	98,085	168,595	154,940
Exports—	tons.	tons.	tons.	tons.	tons.
Phosphate	418,180	363,680	418,950	480,950	547,400

11. Revenue and Expenditure.—The revenue and expenditure of the Administration during the years 1932 to 1936 were as follows :—

NAURU.—REVENUE AND EXPENDITURE.

Heading.	Year ended 31st December—				
	1932.	1933.	1934.	1935.	1936.
	£	£	£	£	£
Revenue	20,235	19,779	19,798	23,487	24,006
Expenditure	15,435	18,748	19,758	20,666	23,989

Of the revenue in 1936, £13,562 was royalty on phosphate, £3,811 consisted of Customs receipts, £1,526 of capitation taxes, and £300 of harbour dues and shipping fees. At the close of the year 1936 the accumulated funds of the Administration amounted to £30,477. Owing to the fall in interest rates interest on investments during 1936 was only £624 compared with £790 during the previous year.

CHAPTER XIII.

POPULATION.

§ 1. Enumerations and Estimates.

The nature of the early "musters" of the population and the subsequent Census enumerations which have been conducted in Australia were reviewed in Official Year Book, Number 15, pp. 1083-5. This review was accompanied by a tabular statement showing the dates on which the various enumerations were made, and the number counted on such occasions.

§ 2. Accuracy of Estimates of Population.

The results obtained at the Census attain a very high degree of accuracy and may generally be accepted without reservation. The estimates of population since the Census of 1921, which have been published in earlier Year Books, have been adjusted in accordance with the results of the Census of 30th June, 1933, and the revised figures are given in this chapter.

Since the establishment of the Commonwealth Bureau of Census and Statistics attention has been given to the improvement of intercensal estimates. There was little doubt that the principal source of error was in the records of migration, and efforts were directed particularly to the improvement of these records with very gratifying results. The Census of 1911 disclosed an error in the pre-censal estimates of an amount equal to a percentage on the recorded overseas departures from Australia of 14.5 per cent. for males and 10 per cent. for females. After the Census of 1921 these adjusting factors were reduced to 1 per cent. for males and $4\frac{1}{2}$ per cent. for females, and from the results of the Census of the 30th June, 1933, it would appear that the accuracy of the records of overseas migration is such that in future no adjustment of the recorded figures for Australia as a whole will be necessary.

It is improbable that the same degree of accuracy as has been attained in the record of external migration can be reached in the case of interstate movements. Records are made of interstate movements by sea, by rail, and by air, but to record the movements by road is impracticable.

§ 3. Census, 1881 to 1933.

1. **Census of 1933.**—The first occasion on which the Census of the several Australian Colonies was taken on the same date was in the year 1881. Under the provisions of the Commonwealth Census and Statistics Act, which provides for the enumeration being dealt with from one centre instead of by each State as formerly, the first Census for the Commonwealth of Australia was taken by the Commonwealth Statistician in 1911, and the second in 1921. In accordance with the provisions of the Census and Statistics Act 1905-1930 the third Commonwealth Census would have been taken in 1931, but owing to the necessity for economy in government expenditure it was decided to defer that Census, and the date was subsequently fixed for the 30th June, 1933, the Census

for the whole of Australia being taken as for the night between the 29th and the 30th June, 1933. The numbers recorded in the several States and Territories on the 4th April, 1921, and the 30th June, 1933, were as follows:—

POPULATION.—CENSUS, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

State or Territory.	4th April, 1921.			30th June, 1933.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
States—						
New South Wales ..	1,071,501	1,028,870	2,100,371	1,313,471	1,282,376	2,600,847
Victoria ..	754,724	776,556	1,531,280	903,244	917,017	1,820,261
Queensland ..	398,969	357,003	755,972	497,217	450,317	947,534
South Australia ..	248,267	246,893	495,160	290,962	289,987	580,949
Western Australia..	177,278	155,454	332,732	233,937	204,915	438,852
Tasmania ..	107,743	106,037	213,780	115,097	112,502	227,599
Territories—						
Northern ..	2,821	1,046	3,867	3,378	1,472	4,850
Federal Capital ..	1,567	1,005	2,572	4,805	4,142	8,947
Australia ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839

2. Increase since Census of 1881.—(i) *Australia.* The increase of population between the Census of 4th April, 1921, and that of 30th June, 1933, was 1,194,105, of which 604,241 were males and 589,864 were females, as compared with an increase of 980,720, comprising 449,835 males and 530,894 females, for the preceding ten years. The population of each sex enumerated at the Census of 3rd April, 1881, 5th April, 1891, 31st March, 1901, 3rd April, 1911, 4th April, 1921, and 30th June, 1933, was as follows:—

POPULATION.—AUSTRALIA, CENSUS, 1881 to 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Date.	Males.	Females.	Persons.	Masculinity. (a)
3rd April, 1881 ..	1,214,913	1,035,281	2,250,194	117.35
5th April, 1891 ..	1,704,039	1,470,353	3,174,392	115.89
31st March, 1901 ..	1,977,928	1,795,873	3,773,801	110.14
3rd April, 1911 ..	2,313,035	2,141,970	4,455,005	107.99
4th April, 1921 ..	2,762,870	2,672,864	5,435,734	103.36
31st March, 1931 (b) ..	3,316,423	3,197,704	6,514,127	103.71
30th June, 1933 ..	3,367,111	3,262,728	6,629,839	103.20

(a) Number of males to each 100 females.
Census of 30.6.1933.

(b) These figures have been estimated from the

(ii) *States and Territories.* The postponement till 1933 of the Census which ordinarily would have been taken in 1931 created a divergence from the intercensal period of ten years which had been observed in Australia since 1881, and consequently the increase shown in the following table for the period 1921–33 (12½ years) is not directly comparable

with the results shown for the earlier periods. The corresponding increases for the ten-year period (1921-1931) have been estimated from the Census of 30th June, 1933, and have been inserted in the table. The increases in the population of the several States and Territories during the last five intercensal periods have been as follows :—

POPULATION.—INTERCENSAL INCREASES.

State or Territory.	1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931 (estimated)	1921-1933 (12½ years).
New South Wales .. {						
Number	374,129	230,892	293,602	453,637	450,930	500,476
Per cent.	49.90	20.54	21.67	27.55	21.47	23.83
Victoria .. {						
Number	278,274	61,230	114,481	215,729	266,178	288,681
Per cent.	32.30	5.37	9.53	16.40	17.38	18.87
Queensland .. {						
Number	180,193	104,411	107,684	150,159	164,388	191,562
Per cent.	84.39	26.52	21.62	24.79	21.75	25.34
South Australia .. {						
Number	39,119	42,813	50,212	86,602	80,024	85,780
Per cent.	14.15	13.57	14.01	21.20	16.16	17.33
Western Australia .. {						
Number	20,074	134,312	97,990	50,618	98,679	106,120
Per cent.	67.57	269.90	53.22	17.94	29.66	31.89
Tasmania .. {						
Number	30,963	25,808	18,736	22,569	10,674	13,819
Per cent.	20.76	17.60	10.86	11.80	4.99	0.46
Northern Territory {						
Number	1,447 ^(a)	— 87 ^(b)	— 1,501	557	1,104	993
Per cent.	41.93 ^(a)	— 1.78 ^(b)	— 31.20	16.83	28.55	23.42
Federal Territory .. {						
Capital						
Number	(a)	(a)	(a)	858	6,416	6,375
Per cent.	(a)	(a)	(a)	50.06	249.46	247.86
Australia .. {						
Number	924,163	599,409	681,204	980,729	1,078,393	1,194,105
Per cent.	41.07	18.88	18.05	22.01	10.84	21.97

(a) Included in New South Wales.

(b) Decrease.

For Australia as a whole the numerical increase during the period 1921-1931 was greater by 97,664 than that for the period 1911-1921, but the percentage increase declined from 22.01 for 1911-1921 to 19.84 for 1921-1931. During the earlier period the increase corresponds to 2.01 per cent. per annum, and in the latter to 1.83 per cent. per annum.

§ 4. Distribution and Fluctuation of Population.

1. Present Numbers.—The population of Australia on the 31st December, 1936, was estimated at 6,806,752 persons, of whom 3,446,198, or 50.63 per cent., were males and 3,360,554, or 49.37 per cent., were females. The increase during the year 1936 was 53,638, equal to 0.79 per cent., males having increased by 24,124, or 0.71 per cent., and females by 29,214, or 0.88 per cent. This increase was due almost entirely to the excess of births over deaths, the natural increase for the year 1936 totalling 52,141. There was a small gain by migration in this year, the excess of arrivals over departures being 1,497.

2. Growth and Distribution.—In issues of the Official Year Book up to No. 15, the male and female populations of Australia as a whole were given at quinquennial periods from 1788, but it is considered that the abridged table presented herewith will suffice for general purposes. The figures for the years 1921 to 1933 inclusive have been adjusted in accordance with the results of the 1933 Census.

ESTIMATED POPULATION.—1800 to 1936.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

As at 31st Decem- ber—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
MALES.									
(a) 1800	3,780	..	..	..	..	..	..	..	3,780
1810	7,585	..	..	..	..	..	..	..	7,585
1820	23,784	..	..	..	..	..	..	..	23,784
1830	33,900	..	..	..	877	(b) 18,108	..	..	52,885
1840	85,560	..	..	8,272	1,434	32,040	..	..	127,306
1850	154,976	..	..	35,902	3,570	44,229	..	..	238,683
1860	197,851	(b) 330,302	(b) 16,817	64,340	9,397	49,653	..	..	668,560
1870	272,121	397,230	69,221	94,894	15,511	53,517	..	..	902,494
1880	404,952	450,558	124,013	147,438	16,985	60,568	..	..	1,204,514
1890	602,704	595,519	223,252	166,049	28,854	76,453	..	..	1,692,831
1900	716,047	601,773	274,684	180,349	110,088	89,763	(c) 4,288	..	1,976,992
1910	858,181	646,482	325,513	206,557	157,071	98,866	2,738	..	2,296,308
1920	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	(b) 1,062	2,751,730
1925	1,184,465	840,817	444,330	276,265	202,554	110,172	2,860	2,298	3,063,761
1926	1,212,046	855,035	452,968	285,013	206,797	108,895	3,146	2,902	3,126,802
1927	1,241,763	870,718	460,319	289,303	215,851	110,013	3,569	3,322	3,194,858
1928	1,266,254	779,478	468,323	289,639	225,072	110,750	3,231	4,070	3,247,417
1929	1,283,241	886,472	473,948	288,597	231,361	112,244	3,496	4,736	3,284,095
1930	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1931	1,302,893	896,429	487,932	289,397	232,397	115,176	3,462	4,891	3,332,577
1932	1,315,003	900,663	492,516	290,254	233,049	116,067	3,553	4,560	3,355,465
1933	1,324,839	905,050	497,468	291,722	234,442	116,891	3,370	4,997	3,378,779
1934	1,335,123	910,373	502,505	292,519	235,239	116,952	3,440	4,928	3,401,079
1935	1,344,339	911,757	508,381	293,650	237,229	117,031	3,482	5,005	3,421,774
1936	1,355,493	915,472	514,174	294,807	238,704	118,665	3,596	5,287	3,446,195
FEMALES.									
(a) 1800	1,437	..	..	..	..	..	..	..	1,437
1810	3,981	..	..	..	..	..	..	..	3,981
1820	9,759	..	..	..	..	..	..	..	9,759
1830	10,688	..	..	..	295	(b) 6,171	..	..	17,154
1840	41,908	..	..	6,358	877	13,959	..	..	63,102
1850	111,924	..	..	27,798	2,310	24,641	..	..	166,673
1860	150,695	(b) 207,932	(b) 11,239	61,242	5,749	40,168	..	..	477,025
1870	225,871	326,695	46,051	89,652	9,624	47,369	..	..	745,262
1880	336,190	408,047	87,027	128,955	12,576	54,222	..	..	1,027,017
1890	510,571	538,209	168,804	152,898	19,648	68,334	..	..	1,458,524
1900	644,258	594,440	219,163	176,901	69,879	83,137	(c) 560	..	1,788,347
1910	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	(b) 910	2,659,567
1925	1,137,875	843,234	400,512	270,783	174,973	109,192	961	1,736	2,939,206
1926	1,164,632	850,952	409,518	275,912	178,130	108,000	951	2,137	2,997,218
1927	1,191,892	871,114	416,066	280,327	184,046	109,138	1,027	2,548	3,056,158
1928	1,216,875	882,268	422,551	282,018	189,549	109,569	1,023	3,507	3,103,353
1929	1,236,452	891,797	428,188	284,376	195,276	111,034	1,284	3,711	3,152,118
1930	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1931	1,263,471	907,141	441,704	287,052	201,200	113,268	1,384	4,030	3,220,020
1932	1,276,728	912,724	440,581	283,039	203,271	114,540	1,433	4,004	3,248,320
1933	1,288,680	919,429	451,563	290,955	205,822	115,219	1,448	4,256	3,277,372
1934	1,301,080	927,117	456,092	291,775	207,371	114,495	1,504	4,264	3,304,598
1935	1,313,327	931,342	462,338	292,793	210,516	115,101	1,600	4,314	3,331,340
1936	1,320,215	936,300	467,100	294,505	212,853	116,301	1,709	4,500	3,360,551

(a) Details as to sex not available for earlier years.

South Wales.

(c) Previously included with South Australia.

(b) Previously included with New

ESTIMATED POPULATION—continued.

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
PERSONS.									
1788	859	..	..	..	..	..	..	..	859
1790	2,056	..	..	..	..	..	..	..	2,056
1800	5,217	..	..	..	..	..	..	..	5,217
1810	11,566	..	..	..	..	..	..	..	11,566
1820	33,543	..	..	..	..	..	..	..	33,543
1830	44,588	..	..	..	1,172	(b)24,279	..	..	70,039
1840	127,468	..	..	14,630	2,311	45,999	..	..	190,408
1850	266,900	..	..	63,700	5,886	68,870	..	..	405,356
1860	348,546	(b)538,234	(b)28,056	125,582	15,346	89,821	..	..	1,145,585
1870	497,992	723,925	115,272	184,546	25,135	100,886	..	..	1,647,756
1880	711,142	888,035	211,010	272,393	2,591	114,799	..	..	2,231,531
1890	1,113,275	1,133,728	392,116	318,947	48,502	144,787	..	..	3,151,355
1900	1,360,305	1,196,213	493,847	357,250	179,067	172,900	(a)4,857	..	3,765,339
1910	1,643,855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	(b)1,972	5,411,297
1925	2,322,340	1,684,051	844,842	547,048	377,527	219,364	3,821	4,034	6,003,027
1926	2,376,678	1,711,987	862,486	560,925	385,233	217,575	4,097	5,039	6,124,020
1927	2,433,955	1,741,832	876,385	569,630	399,897	219,151	4,596	5,870	6,251,016
1928	2,483,129	1,767,746	890,877	572,587	414,621	220,319	4,254	8,237	6,355,770
1929	2,519,693	1,778,269	902,136	572,973	426,637	223,278	4,780	8,447	6,436,213
1930	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1931	2,566,314	1,803,570	929,726	577,079	433,686	228,464	4,846	8,921	6,552,606
1932	2,591,731	1,813,387	939,097	579,293	436,320	230,607	4,786	8,564	6,603,785
1933	2,613,519	1,824,479	949,031	582,677	440,264	232,110	4,818	9,253	6,656,151
1934	2,636,203	1,837,909	959,497	584,294	442,610	232,447	4,944	9,192	6,705,677
1935	2,657,666	1,843,099	970,719	586,443	447,745	233,032	5,091	9,319	6,753,114
1936	2,681,736	1,851,862	982,134	589,312	451,557	235,059	5,395	9,787	6,806,752

(a) Previously included with South Australia.

(b) Previously included with New South Wales.

A comparison of annual rates of growth of population of Australia and other countries will be found in § 5 par. 4 of this chapter.

The growth of the population of Australia and of each State thereof is illustrated by the graphs accompanying this chapter on pages 327 to 330.

3. Mean Population.—(i) *Calendar Years.* The following table shows the mean population for each State and Territory for the calendar years 1925 to 1936. The figures have been adjusted in accordance with the results of the 1933 Census:—

MEAN POPULATION, CALENDAR YEARS, 1925 TO 1936.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Year ended 31st December—	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia	Tas- mania.	Nor. Terr.	Fed. Cap. Terr.	Australia.
1925 ..	2,295,516	1,671,537	836,844	539,920	372,070	215,553	..	4,809	5,040,977
1926 ..	2,346,903	1,696,758	857,071	553,800	380,910	213,800	..	6,215	6,059,423
1927 ..	2,403,881	1,727,734	870,043	565,284	..	214,051	1,111	7,460	6,184,584
1928 ..	2,460,470	1,751,974	884,815	570,863	407,576	215,471	..	8,198	6,303,766
1929 ..	2,503,026	1,779,133	897,569	572,457	420,750	217,752	..	8,541	6,394,701
1930 ..	2,532,289	1,786,217	910,319	573,242	429,079	220,033	1,119	8,961	6,466,019
1931 ..	2,555,871	1,799,241	924,825	575,717	432,347	221,811	1,199	8,891	6,526,572
1932 ..	2,579,741	1,808,618	935,575	578,010	435,041	227,084	1,947	8,925	6,577,911
1933 ..	2,601,782	1,820,568	945,454	581,019	438,688	228,434	1,795	9,056	6,629,861
1934 ..	2,623,560	1,830,898	955,584	583,343	441,611	229,161	4,333	9,259	6,678,349
1935 ..	2,645,575	1,839,381	966,198	585,015	445,384	229,596	4,001	9,382	6,725,652
1936 ..	2,667,839	1,847,841	978,589	587,549	450,03	230,870	..	9,765	6,777,741

(ii) *Financial Years.* The mean population for financial years is now widely used in connexion with rates for those statistics which are tabulated over a financial year period. The following table shows the mean population for each State and Territory for the years ended 30th June, 1925 to 1937. The figures have been adjusted in accordance with the results of the 1933 Census.

MEAN POPULATION, FINANCIAL YEARS, 1925 to 1937.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Year ended 30th June.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Nor. Terr.	Fed. Cap. Terr.	Australia.
1925 ..	2,270,024	1,657,111	825,313	533,461	368,525	215,997	3,768	4,312	5,878,511
1926 ..	2,320,184	1,683,724	847,757	546,514	376,933	214,795	3,875	5,443	5,999,225
1927 ..	2,375,204	1,711,855	864,502	560,179	385,780	213,212	4,152	6,873	6,121,757
1928 ..	2,432,731	1,741,432	877,753	568,746	399,777	214,074	4,557	7,912	6,246,982
1929 ..	2,484,071	1,761,212	891,435	572,028	414,489	216,411	4,369	8,419	6,352,434
1930 ..	2,518,553	1,778,761	903,703	572,577	425,785	219,269	4,762	8,836	6,432,246
1931 ..	2,544,691	1,792,802	917,830	574,383	431,022	222,820	5,011	8,877	6,497,436
1932 ..	2,567,639	1,804,014	930,456	576,893	433,596	226,045	4,932	8,961	6,552,536
1933 ..	2,590,840	1,814,797	940,628	579,422	436,798	227,927	4,867	8,740	6,604,019
1934 ..	2,613,063	1,824,943	950,351	582,394	440,363	229,041	4,883	9,294	6,654,332
1935 ..	2,634,353	1,836,439	960,859	584,162	443,160	229,147	5,020	9,276	6,702,416
1936 ..	2,656,638	1,843,180	972,120	586,172	447,918	230,323	5,138	9,502	6,759,991
1937 (a)	2,680,592	1,852,378	984,109	588,243	451,871	231,904	5,323	9,977	6,804,397

(a) Subject to revision.

4. *Proportion of Area and Population, Masculinity and Density—States, 1936.*—A previous table showed the estimated number of persons on the 31st December, 1936, in each of the States and Territories. In the following table the percentages of the total area and of the total population represented by each State or Territory are given, together with the masculinity and the density of population :—

AREA, POPULATION, MASCULINITY AND DENSITY, 1936.

State or Territory.	Percentage of Total Area.	Percentage of Estimated Population, 31st December, 1936.			Masculinity. (a)	Density. (b)
		Males.	Females.	Persons.		
	%	%	%	%		
New South Wales ..	10.40	39.33	39.47	39.40	102.21	8.67
Victoria ..	2.96	26.56	27.87	27.21	97.77	21.07
Queensland ..	22.54	14.92	13.93	14.43	109.88	1.46
South Australia ..	12.78	8.56	8.76	8.66	100.10	1.55
Western Australia ..	32.81	6.93	6.33	6.63	112.15	0.46
Tasmania ..	0.83	3.44	3.46	3.45	101.95	8.97
Northern Territory ..	17.60	0.11	0.05	0.08	210.42	0.01
Federal Capital Territory ..	0.03	0.15	0.13	0.14	117.49	10.41
Australia ..	100.00	100.00	100.00	100.00	102.55	2.29

(a) Number of males to each 100 females.

(b) Number of persons per square mile.

Additional information regarding masculinity and density of population appears in later sections of this chapter.

5. *Urban and Rural Distribution.*—At the Census of 30th June, 1933, information was obtained regarding the distribution of the population amongst urban and rural areas. The metropolitan division of each State includes the capital city and the adjoining

urban municipal areas; the urban provincial districts in all States excepting Tasmania were taken for Census purposes as being those cities and towns which are not adjacent to the metropolitan areas, and which are incorporated for local government purposes; the rural area comprises the remainder of the State whether incorporated or not incorporated; while those persons classed as migratory were on board ships in Australian ports or were travelling on long-distance trains throughout Census night.

The results obtained at the Census for each State and Territory are shown in the following table:—

URBAN AND RURAL POPULATION.—CENSUS, 30th JUNE, 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Division.	Males.	Females.	Persons.	Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
				Census, 1921.	Census, 1933.	
NEW SOUTH WALES.						
Urban—				%	%	%
Metropolitan	591,104	644,163	1,235,267	42.80	47.50	37.40
Provincial ..	283,439	282,001	565,440	25.00	21.74	7.70
Rural ..	439,486	355,615	795,101	31.64	30.57	19.64
Migratory ..	4,442	597	5,039	0.56	0.19	—56.99
Total ..	1,318,471	1,282,376	2,600,847	100.00	100.00	23.83

VICTORIA.

Urban—						
Metropolitan	464,775	527,159	991,934	50.05	54.49	29.42
Provincial ..	94,790	103,401	198,191	12.24	10.89	5.71
Rural ..	342,233	286,325	628,558	37.33	34.53	9.97
Migratory ..	1,446	132	1,578	0.38	0.09	—72.55
Total ..	903,244	917,017	1,820,261	100.00	100.00	18.87

QUEENSLAND.

Urban—						
Metropolitan	143,525	156,223	299,748	27.77	31.63	42.77
Provincial ..	97,853	101,291	199,144	24.30	21.02	8.40
Rural ..	252,357	192,232	444,589	47.49	46.92	23.84
Migratory ..	3,482	571	4,053	0.44	0.43	23.12
Total ..	497,217	450,317	947,534	100.00	100.00	25.34

SOUTH AUSTRALIA.

Urban—						
Metropolitan	147,936	164,683	312,619	51.57	53.81	22.42
Provincial ..	25,290	26,166	51,456	8.41	8.86	23.58
Rural ..	115,909	98,853	214,762	39.39	36.97	10.10
Migratory ..	1,827	285	2,112	0.63	0.36	—31.74
Total ..	290,962	289,987	580,949	100.00	100.00	17.33

NOTE.—Minus sign (—) denotes decrease.

URBAN AND RURAL POPULATION, ETC.—*continued.*

Division.	Males.	Females.	Persons. 4	Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
				Census, 1921. Census, 1933.		
WESTERN AUSTRALIA.						
Urban—				%	%	%
Metropolitan	99,288	108,152	207,440	46.55	47.27	33.94
Provincial ..	23,060	21,745	44,805	12.79	10.21	5.25
Rural ..	108,732	74,677	183,409	39.10	41.79	40.98
Migratory ..	2,857	341	3,198	1.56	0.73	-38.38
Total ..	233,937	204,915	438,852	100.00	100.00	31.89
TASMANIA.						
Urban—						
Metropolitan	28,351	32,055	60,406	24.49	26.54	15.36
Provincial ..	26,971	29,806	56,777	26.03	24.95	2.04
Rural ..	59,138	50,629	109,767	49.17	48.23	4.42
Migratory ..	637	12	649	0.31	0.28	-0.46
Total ..	115,097	112,502	227,599	100.00	100.00	6.46
NORTHERN TERRITORY.						
Urban—						
Provincial ..	912	654	1,566	36.18	32.29	11.94
Rural ..	2,391	818	3,209	62.14	66.16	33.54
Migratory ..	75	..	75	1.68	1.55	15.38
Total ..	3,378	1,472	4,850	100.00	100.00	25.42
FEDERAL CAPITAL TERRITORY.						
Urban—						
Provincial ..	3,839	3,486	7,325	..	81.87	..
Rural ..	966	656	1,622	99.65	18.13	..
Migratory ..	..	..	..	0.35	..	..
Total ..	4,805	4,142	8,947	100.00	100.00	247.86
AUSTRALIA.						
Urban—						
Metropolitan	1,474,979	1,632,435	3,107,414	43.01	46.87	32.90
Provincial ..	556,154	568,550	1,124,704	19.09	16.97	8.41
Rural ..	1,321,212	1,059,805	2,381,017	37.35	35.91	17.27
Migratory ..	14,766	1,938	16,704	0.55	0.25	-43.88
Total ..	3,367,111	3,262,728	6,629,839	100.00	100.00	21.97

NOTE.—Minus sign (—) denotes decrease.

At the 30th June, 1933, the metropolitan divisions contained 46.87 per cent. of the total population of Australia as compared with 43.01 per cent. at the Census of 1921. Victoria has the largest percentage of population residing in the metropolitan area (54.49) but is closely followed in this respect by South Australia (53.81). During the intercensal period, however, the highest rates of increase in metropolitan population were experienced in Queensland and New South Wales.

The percentage of population in the rural divisions of Australia has declined from 37.35 per cent. in the year 1921 to 35.91 per cent. on the 30th June, 1933. Tasmania, with 48.23 per cent., has the largest proportion of population residing in the rural sections of the State and Queensland is next with 46.92 per cent. Since the Census of 1921, however, the greatest percentage of increase in rural population has occurred in Western Australia (40.98 per cent.), which was more than double the average rate of increase for rural areas in Australia.

A feature of the metropolitan population is its high femininity. In 1921, 52.3 per cent. of the metropolitan population was composed of females, and in 1933 the proportion had risen slightly to 52.5 per cent., the proportion being highest in Victoria and Tasmania at 53.1 per cent.

6. Metropolitan Population—Australia and Other Countries.—The abnormal concentration of population in the capitals of the States of Australia, as compared with other countries, may be readily seen from the following table. It may be mentioned, however, that, in many countries, the capital is not the most populous of the great cities, whereas, in Australia, the capital is invariably the most populous city of its State, and in some States is the only one of importance :—

METROPOLITAN POPULATION.—AUSTRALIA AND OTHER COUNTRIES.

State or Country.	Metropolis.	Year.	Metropolitan Population.	Percentage of Total of State or Country.
				%
Australia ..	Canberra ..	1936	8,050	..
New South Wales ..	Sydney ..	"	1,267,350	47.26
Victoria ..	Melbourne ..	"	1,018,200	54.98
Queensland ..	Brisbane ..	"	313,430	31.91
South Australia ..	Adelaide ..	"	316,860	53.77
Western Australia ..	Perth ..	"	212,150	46.98
Tasmania ..	Hobart ..	"	61,500	26.16
Australia ..	(7 Cities) ..	"	3,197,540	47.01
England ..	London (a) ..	1935	8,474,903	20.85
Scotland ..	Edinburgh ..	1936	464,600	9.35
Northern Ireland ..	Belfast ..	1929	415,000	33.20
Irish Free State ..	Dublin ..	1935	428,800	14.14
Canada ..	Ottawa ..	1931	126,872	1.22
South Africa ..	Capetown (c) ..	1933	140,900	7.45
New Zealand ..	Wellington ..	1936	150,000	9.53
Austria ..	Vienna ..	1934	1,874,130	27.72
Belgium ..	Brussels ..	"	891,057	10.77
Czechoslovakia ..	Prague ..	1935	911,290	6.01
Denmark ..	Copenhagen ..	"	831,218	22.56
France ..	Paris ..	1936	2,829,750	6.75
Germany ..	Berlin ..	1935	4,194,000	6.32
Greece ..	Athens ..	1931	473,200	7.30
Hungary ..	Budapest ..	1935	1,049,876	11.74
Italy ..	Rome ..	"	1,189,685	2.76
Japan ..	Tokyo (d) ..	"	5,875,388	8.48
Netherlands ..	Amsterdam ..	"	781,897	9.22
Norway ..	Oslo ..	1930	253,124	9.55
Portugal ..	Lisbon ..	1933	594,000	8.88
Russia (Soviet Union) ..	Moscow ..	1934	3,613,600	2.18
Spain ..	Madrid ..	1935	991,436	4.03
Sweden ..	Stockholm ..	1934	526,027	8.44
United States ..	Washington ..	1930	486,869	..
N. Y. State ..	New York ..	1934	7,473,701	(b) 55.34

(a) Greater London.

(b) Percentage in 1933.

(c) European population.

(d) Greater Tokyo.

7. Principal Urban Areas.—The following table gives the figures of the population of the principal urban incorporated areas in each State and Territory of Australia at the Census of 30th June, 1933 :—

POPULATION OF PRINCIPAL URBAN INCORPORATED AREAS.—AUSTRALIA,
30th JUNE, 1933.

City or Town.	Population.	City or Town.	Population.
New South Wales—		Queensland—continued.	
Sydney and Suburbs	1,235,267	Townsville	25,876
Newcastle and Suburbs	104,485	Ipswich	22,498
Broken Hill	26,925	Cairns	11,993
Goulburn	14,849	Bundaberg	11,466
Cessnock	14,385	Maryborough	11,415
Lithgow	13,444	Mackay	10,665
Lismore	11,762	Gympie	7,749
Wagga Wagga	11,631	Charters Towers	6,973
Wollongong	11,403	Warwick	6,664
Albury	10,543		
Bathurst	10,413	South Australia—	
Tamworth	9,913	Adelaide and Suburbs	312,619
Orange	9,634	Port Pirie	11,677
Fairfield	8,709	Mount Gambler	5,542
Dubbo	8,344	Murray Bridge	3,651
West Maitland	8,191	Port Augusta	3,270
Armidale	6,794	Peterborough	3,059
Katoomba	6,445	Port Lincoln	3,006
Grafton	6,411		
Liverpool	6,315	Western Australia—	
Cabramatta and Canley Vale	6,107	Perth and Suburbs	(a) 207,440
Parkes	5,846	Kalgoorlie and Suburbs	17,326
Forbes	5,355	Bunbury	5,140
Glen Innes	5,352	Geraldton	4,984
Inverell	5,305	Northam	4,817
Casino	5,287	Albany	4,076
Cowra	5,056	Collie	3,784
Victoria—		Tasmania—	
Melbourne and Suburbs	991,934	Hobart and Suburbs	60,406
Geelong and Suburbs	39,223	Launceston and Suburbs	32,833
Ballarat and Suburbs	37,411	Devonport	5,151
Bendigo and Suburbs	29,131	Queenstown	3,809
Warrnambool	8,906	Burnie	3,390
Mildura	6,617	Ulverstone	2,701
Hamilton	5,786		
Shepparton	5,698	Northern Territory—	
Maryborough	5,631	Darwin	1,566
Wonthaggi	5,593		
Horsham	5,273	Federal Capital Territory—	
Castlemaine	5,221	Canberra	7,325
Queensland—			
Brisbane and Suburbs	299,748		
Rockhampton	29,369		
Toowoomba	26,423		

(a) Includes the City of Fremantle, 25,224.

8. Provincial Urban Areas.—In paragraph 5 above the percentage of the total population of each State which is located in incorporated urban provincial areas is shown. In the following table, however, the aggregate population of all cities and towns, outside the metropolitan area of each State, with 2,000 and 3,000 or more inhabitants is shown, irrespective of whether such centres are incorporated separately or not. In addition, the percentage of the aggregate population of these cities and towns to the total population of the State at the Census of the 30th June, 1933, is stated :—

Cities and Towns outside Metropolitan Area with Population of—

State or Territory.	2,000 and over.			3,000 and over.		
	Number.	Population.	Percentage of Population.	Number.	Population.	Percentage of Population.
New South Wales ..	106	567,094	21.80	69	474,150	18.23
Victoria ..	51	266,355	14.63	29	212,686	11.68
Queensland ..	33	233,154	24.61	19	199,496	21.05
South Australia ..	9	37,207	6.40	6	30,205	5.19
Western Australia ..	9	42,572	9.70	7	37,697	8.59
Tasmania ..	6	44,512	19.55	4	39,971	17.56
Federal Capital Territory ..	1	7,325	81.87	1	7,325	81.87
Total ..	215	1,198,219	18.07	135	1,001,530	15.16

9. Principal Cities in the World.—The following table shows the population of the world's largest cities at the latest available dates :—

POPULATION OF THE WORLD'S LARGEST CITIES.

(Cities in the British Empire are printed in *Italics*.)

Country.	City.	Year.	City Population (000 omitted).	Country.	City.	Year.	City Population (000 omitted).
England ..	<i>London (a)</i>	1935	8,475	Spain ..	Barcelona	1935	1,037
U.S.A. ..	New York ..	1934	7,474	China ..	Nanking ..	1936	1,019
Japan ..	Tokyo (b) ..	1935	5,875	Australia ..	<i>Melbourne ..</i>	1936	1,018
Germany ..	Berlin ..	1935	4,194	England ..	<i>Birmingham</i>	1935	1,014
Russia ..	Moscow ..	1934	3,614	Spain ..	Madrid ..	1935	991
U.S.A. ..	Chicago ..	1934	3,491	U.S.A. ..	Cleveland ..	1934	923
China ..	Shanghai ..	1936	3,490	France ..	Marseilles ..	1936	914
Japan ..	Osaka ..	1935	2,990	Japan ..	Kobe ..	1935	912
France ..	Paris ..	1936	2,830	Czechoslovakia	Prague ..	1935	911
Russia ..	Leningrad ..	1934	2,711	Belgium ..	Brussels ..	1934	891
Arg. Republic	Buenos Aires	1935	2,247	Italy ..	Naples ..	1935	878
U.S.A. ..	Philadelphia	1934	2,004	Canada ..	<i>Montreal ..</i>	1935	863
Austria ..	Vienna ..	1934	1,874	China ..	Canton ..	1931	861
Brazil ..	Rio de Janeiro	1935	1,701	England ..	<i>Liverpool ..</i>	1935	855
China ..	Peiping ..	1936	1,556	U.S.A. ..	St. Louis ..	1934	842
U.S.A. ..	Detroit ..	1934	1,487	U.S.A. ..	Baltimore ..	1934	834
China ..	Tientsin ..	1936	1,292	Denmark ..	Copenhagen	1935	831
U.S.A. ..	Los Angeles	1934	1,283	China ..	Chengtu ..	1931	800
Australia ..	<i>Sydney</i> ..	1936	1,267	U.S.A. ..	Boston ..	1934	795
Egypt ..	Cairo ..	1932	1,233	Netherlands	Amsterdam	1935	782
Poland ..	Warsaw ..	1935	1,225	China ..	Hankow ..	1931	778
India ..	<i>Calcutta</i> ..	1931	1,197	Chile ..	Santiago ..	1933	771
Italy ..	Rome ..	1935	1,190	Germany ..	Cologne ..	1935	761
India ..	<i>Bombay</i> ..	1931	1,161	England ..	<i>Manchester</i>	1935	748
Brazil ..	Sao Paulo ..	1935	1,151	Germany ..	Munich ..	1935	742
Scotland ..	<i>Glasgow</i> ..	1936	1,124	Russia ..	Baku ..	1933	710
Germany ..	Hamburg ..	1935	1,101	Germany ..	Leipzig ..	1935	706
Japan ..	Nagoya ..	1935	1,083	Japan ..	Yokohama	1935	704
Japan ..	Kyoto ..	1935	1,081	Egypt ..	Alexandria	1934	699
Mexico ..	Mexico City	1933	1,065	U.S.A. ..	Pittsburgh	1934	686
Italy ..	Milan ..	1935	1,054	U.S.A. ..	San Francisco	1931	680
Hungary ..	Budapest ..	1935	1,050	Uruguay ..	Montevideo	1935	666

(a) Greater London.

(b) Greater Tokyo.

POPULATION OF THE WORLD'S LARGEST CITIES—*continued.*

(Cities in the British Empire are printed in Italics.)

Country.	City.	Year.	City Population (ooo omitted).	Country.	City.	Year.	City Population (ooo omitted).
Germany ..	Essen ..	1935	660	Netherlands	Rotterdam	1935	598
Russia ..	Kharkov ..	1933	654	Portugal ..	Lisbon ..	1932	594
India ..	<i>Madras ..</i>	<i>1931</i>	<i>647</i>	France ..	Lyons ..	1936	571
Hong Kong	<i>Hong Kong</i>	<i>1934</i>	<i>644</i>	Siam ..	Bangkok ..	1932	569
Rumania ..	Bucharest ..	1934	640	Germany ..	Frankfort on Main ..	1933	556
Poland ..	Lodz ..	1935	639	Cuba ..	Havana ..	1934	547
Italy ..	Genoa ..	1935	638	Germany ..	Dortmund	1935	543
Germany ..	Dresden ..	1935	637	Russia ..	Kiev ..	1933	539
China ..	Chungking ..	1931	635	Sweden ..	Stockholm	1934	526
Canada ..	<i>Toronto ..</i>	<i>1931</i>	<i>631</i>	Russia ..	Rostov-on- Don ..	1933	521
China ..	Wenchow ..	1931	631	England ..	<i>Sheffield ..</i>	<i>1935</i>	<i>521</i>
Germany ..	Breslau ..	1935	629	China ..	Hanchow ..	1936	507
Italy ..	Turin ..	1935	623	China ..	Lanchow ..	1931	506
China ..	Wuchang ..	1931	610	Arg. Republic	Rosario	1934	500
China ..	Changsha ..	1931	607		(Santa Fe)		
U.S.A. ..	Buffalo ..	1934	602				
U.S.A. ..	Milwaukee ..	1934	600				

§ 5. Elements of Increase.

1. Natural Increase.—(i) *General.* The two factors which contribute to the growth of a population are the “natural increase” by excess of births over deaths, and the “net migration,” i.e., the excess of arrivals over departures. In earlier issues of the Official Year Book particulars of the natural increase from 1861 were given for each sex and State (*See* No. 22, page 899). In the following table particulars for each sex are given in States for each quinquennium from 1901 to 1935 and for the latest ten years. The natural increase for Australia from 1861 to 1936 inclusive was 4,343,538, consisting of 2,014,663 males and 2,328,875 females, and represented 76.73 per cent. of the total increase in population. During the present century the rate of natural increase grew until it reached the maximum rate of 17.44 per thousand of population in the year 1914, but it steadily declined after that year to 7.07 in 1934. The figure has risen to 7.69 per thousand in 1936 as the result of slight gains during each of the last two years. A graph showing the natural increase to the population of each State and of Australia, from year to year since 1860, appears on page 329 of this chapter.

POPULATION.—NATURAL INCREASE (a)—1901 to 1936.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
MALES.									
1901-05 ..	51,179	34,332	16,628	12,149	8,283	7,955	-223	(b)	130,303
1906-10 ..	64,127	38,048	21,115	14,500	10,760	8,703	-264	(b)	150,191
1911-15 ..	77,070	46,160	27,497	18,673	12,730	9,386	-201	78	191,393
1916-20 ..	72,030	41,388	26,804	16,413	9,787	8,673	-125	75	175,135
1921-25 ..	80,800	40,254	28,041	16,724	10,284	8,543	-08	37	164,572
1926-30 ..	72,430	43,750	25,045	14,583	11,245	7,004	-131	175	174,704
1931-35 ..	51,566	25,286	20,627	8,686	8,576	5,810	-93	270	120,728
1927 ..	14,825	9,086	5,351	3,092	2,251	1,441	-37	13	36,022
1928 ..	15,505	8,421	5,499	3,045	2,264	1,263	-27	37	36,007
1929 ..	13,046	8,263	4,430	2,725	2,076	1,334	-25	56	31,905
1930 ..	14,507	8,548	5,255	2,491	2,479	1,419	-25	61	34,735
1931 ..	12,654	6,442	4,650	1,978	2,052	1,410	-25	64	29,225
1932 ..	11,010	5,078	4,272	1,721	1,817	1,179	-22	60	25,115
1933 ..	10,072	5,183	3,872	2,013	1,608	1,133	-13	42	23,910
1934 ..	8,931	4,245	4,010	1,519	1,427	1,116	-13	42	21,277
1935 ..	8,899	4,338	3,823	1,455	1,672	972	-20	62	21,201
1936 ..	10,051	4,800	4,563	1,548	1,676	1,030	14	55	23,743

(a) Excess of births over deaths.

(b) Part of New South Wales prior to 1911.

NOTE.—Minus sign (—) denotes excess of deaths over births.

POPULATION.—NATURAL INCREASE (a)—continued.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
FEMALES.									
1901-05..	59,163	39,831	22,910	12,701	11,468	8,027	28	(b)	154,128
1906-10..	71,297	42,629	26,048	14,754	13,354	8,522	33	(b)	176,637
1911-15..	87,074	50,258	33,403	19,318	16,262	9,604	62	78	216,119
1916-20..	81,799	42,886	32,273	16,825	13,185	8,821	135	72	195,996
1921-25..	89,438	49,685	34,289	17,595	13,839	8,837	127	82	213,892
1926-30..	80,733	44,417	31,128	15,407	14,406	6,893	126	203	193,313
1931-35..	60,300	28,216	26,036	9,228	12,352	5,953	156	280	142,521
1927 ..	16,265	9,215	6,404	3,272	2,838	1,359	29	12	39,394
1928 ..	16,629	8,369	6,308	3,216	2,800	1,296	39	36	38,693
1929 ..	15,043	8,624	5,747	2,901	3,045	1,287	13	58	36,718
1930 ..	16,386	8,620	6,229	2,642	2,947	1,419	19	71	38,333
1931 ..	13,797	6,857	5,658	2,213	2,816	1,295	27	61	32,724
1932 ..	12,542	5,581	5,282	1,843	2,433	1,290	28	62	29,061
1933 ..	11,801	5,753	4,924	1,983	2,476	1,228	26	51	28,242
1934 ..	10,930	4,935	5,158	1,537	2,298	1,009	41	61	25,969
1935 ..	11,230	5,090	5,014	1,652	2,329	1,131	34	45	26,525
1936 ..	11,766	5,305	5,599	1,899	2,573	1,158	39	59	28,398

PERSONS.

1901-05..	110,342	74,163	39,538	24,850	19,751	15,982	-195	(b)	284,431
1906-10..	135,424	81,577	47,403	29,254	24,116	17,225	-231	(b)	334,828
1911-15..	164,144	96,418	60,960	37,991	28,992	18,990	-139	156	407,512
1916-20..	153,829	84,274	59,167	33,238	22,972	17,494	10	147	371,131
1921-25..	170,298	98,939	63,207	34,316	24,123	17,380	59	119	408,464
1926-30..	153,163	88,173	56,773	29,990	25,051	13,894	-	5	378
1931-35..	111,866	53,502	46,663	17,914	20,928	11,763	63	550	263,249
1927 ..	31,090	18,301	11,755	6,364	5,089	2,800	- 8	25	75,416
1928 ..	32,134	16,790	11,807	6,261	5,064	2,559	12	73	74,700
1929 ..	28,089	16,887	10,177	5,626	5,121	2,621	- 12	114	68,623
1930 ..	30,893	17,168	11,484	5,133	5,426	2,838	- 6	132	73,068
1931 ..	26,451	13,299	10,308	4,191	4,868	2,705	2	125	61,949
1932 ..	23,552	10,659	9,554	3,564	4,250	2,469	6	122	54,176
1933 ..	21,873	10,936	8,796	3,996	4,084	2,361	13	93	52,152
1934 ..	19,861	9,180	9,168	3,056	3,725	2,125	28	103	47,246
1935 ..	20,129	9,428	8,837	3,107	4,001	2,103	14	107	47,726
1936 ..	21,817	10,105	10,162	3,447	4,249	2,194	53	114	52,141

RATE OF NATURAL INCREASE (c)—PERSONS.

1901-05..	15.50	12.31	15.34	14.02	15.07	17.85	- 8.8	(b)	14.60
1906-10..	17.25	13.11	16.99	15.44	18.52	18.37	-12.6	(b)	15.93
1911-15..	18.27	13.91	18.61	17.55	18.76	19.63	- 7.6	13.71	17.05
1916-20..	15.69	11.65	16.74	14.51	14.56	17.46	0.43	12.23	14.57
1921-25..	15.47	12.32	15.87	13.28	13.69	16.14	3.13	6.84	14.34
1926-30..	12.51	10.10	12.84	10.58	12.63	12.85	-0.22	9.60	11.72
1931-35..	8.60	5.88	9.87	6.17	9.54	10.33	2.54	12.11	7.94
1927 ..	12.93	10.59	13.50	11.26	12.98	13.14	-1.80	3.35	12.19
1928 ..	13.06	9.53	13.34	10.97	12.42	11.88	2.00	8.00	11.83
1929 ..	11.22	9.54	11.34	9.83	12.17	12.04	-2.69	13.35	10.73
1930 ..	12.20	9.61	12.62	8.95	12.65	12.85	-1.21	14.73	11.30
1931 ..	10.35	7.39	11.15	7.28	11.26	12.03	0.40	14.20	9.49
1932 ..	9.13	5.89	10.21	6.17	9.77	10.87	1.22	13.67	8.24
1933 ..	8.41	6.01	9.30	6.88	9.31	10.31	2.67	10.27	7.87
1934 ..	7.57	5.01	9.59	5.24	8.44	9.27	5.68	11.12	7.07
1935 ..	7.61	5.13	9.15	5.31	8.98	9.16	2.74	11.40	7.10
1936 ..	8.18	5.47	10.38	5.87	9.44	9.50	10.00	11.67	7.60

(a) Excess of births over deaths. (b) Part of New South Wales prior to 1911. (c) Excess of births over deaths per 1,000 mean annual population. NOTE.—Minus sign (—) denotes excess of deaths over births.

The above table shows the decline which has taken place in the rate of natural increase in all States of the Commonwealth since the year 1914, the rate for 1936 being less than half that in the peak year mentioned. During the first five years of the present century the average increment to the population of Australia by this means was about 57,000 persons per annum. The increment rose to a maximum of 82,000 persons per annum in 1921-25, but thereafter fell to 53,000 persons per annum in the quinquennium 1931-35. The natural increase in each of the years 1934 and 1935 was only 47,000 but in 1936 there was an appreciable increase to 52,000 persons, which is, however, still below the average for the previous quinquennial period.

(ii) *Comparison with other Countries.* Notwithstanding its low birth-rate Australia has a higher rate of natural increase than most European Countries, owing to the fact that its death-rate is very low. The following table gives a comparison between the average rates per annum of natural increase during the latest five-yearly period for the several States of Australia and for the Dominion of New Zealand, with those of some of the principal countries for which such information is available. Corresponding annual rates for the period 1909-1913 have also been appended. Comparisons with the earlier period show, with one or two exceptions, that the fall in the rate of natural increase has been general throughout most countries of the world :—

NATURAL INCREASE PER ANNUM PER 1,000 OF MEAN POPULATION.

(VARIOUS COUNTRIES.)

Country.	1909-13.	1931-35.	Country.	1909-13.	1931-35.
Australasia—			Europe—continued.		
Tasmania ..	18.8	10.2	Germany ..	12.8	5.3
Queensland ..	17.9	10.0	Scotland ..	10.7	5.0
Western Australia	18.1	9.5	Norway ..	12.4	5.0
New South Wales	18.0	8.5	Switzerland ..	9.3	4.6
New Zealand ..	17.1	8.3	Belgium ..	7.8	(c) 4.4
Australia ..	16.7	7.9	England and Wales	10.7	3.0
South Australia ..	16.8	6.1	Sweden ..	10.4	2.5
Victoria..	13.6	5.8	France ..	0.8	0.7
Europe—			Asia—		
	1909-13.	1931-35.	Japan ..	13.1	(c) 13.6
Russia ..	15.8	(a) 17.4	Africa—		
Netherlands ..	15.1	12.3	Union of South		
Spain ..	9.3	10.7	Africa (whites only)	(b)	14.5
Italy ..	12.8	9.7	America—		
Denmark ..	13.9	6.8	Canada ..	(b)	(c) 12.2
Northern Ireland..	6.3	(c) 6.0	United States ..	(b)	(c) 6.5
Irish Free State ..	6.3	5.4			

(a) 1926-30.

(b) Not available.

(c) 1930-34.

2. *Net Migration.**—The other factor of increase in the population, viz., the excess of arrivals over departures, known as “net migration” is, from its nature, much more subject to variations than is the factor of “natural increase”. These variations are due to numerous causes, some of which are referred to in Official Year Book No. 22, pp. 906-7.

* The subject of migration is dealt with at some length later in this chapter.

Particulars of the increase by net migration are given below for quinquennial periods from 1901 to 1935 and annually for the last ten years. The figures have been adjusted in accordance with the results of the Census of the 30th June, 1933 :—

POPULATION.—INCREASE BY NET MIGRATION.—1901 to 1936.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
MALES.									
1901-05..	15,671	-37,971	495	-11,031	28,127	-1,771	- 697	(a)	-7,177
1906-10..	11,157	9,400	12,291	10,590	711	-5,784	- 366	(a)	37,999
1911-15..	38,483	1,568	13,037	-4,263	189	-9,599	1,050	- 90	40,375
1916-20..	23,150	18,205	3,614	7,920	-3,782	- 67	- 551	- 30	48,519
1921-25..	35,660	37,760	18,834	14,244	15,375	-5,630	- 17	1,199	117,459
1926-30..	37,524	7,849	11,584	-2,230	19,009	-3,668	- 870	2,259	73,257
1931-35..	- 1,646	-5,951	6,195	-3,654	-4,215	-1,384	- 24	- 3	-10,676
1927 ..	14,892	6,597	2,000	1,198	6,803	- 323	- 460	- 407	32,034
1928 ..	8,986	339	2,505	-2,709	6,957	- 526	- 311	1,311	10,552
1929 ..	3,941	-1,269	1,195	-3,767	4,213	- 160	- 290	- 10	4,773
1930 ..	- 3,329	-2,598	2,356	-2,470	- 972	- 158	- 128	- 65	-7,108
1931 ..	- 4,180	-2,435	1,723	-1,199	-2,523	- 261	- 112	- 95	-8,370
1932 ..	1,100	- 844	312	- 864	-1,165	- 288	- 87	- 391	-2,227
1933 ..	- 236	- 796	1,080	- 545	- 215	- 309	- 30	- 395	- 596
1934 ..	1,353	1,078	1,027	- 722	- 630	-1,055	- 83	- 111	1,023
1935 ..	317	-2,954	2,053	- 324	318	- 7	- 62	- 15	- 506
1936 ..	1,103	-1,085	1,230	- 391	- 201	- 302	- 100	- 227	681
FEMALES.									
1901-05..	1,566	-21,984	-2,398	-8,448	22,293	- 726	- 81	(a)	-9,616
1906-10..	9,390	10	7,780	4,403	1,867	-4,023	- 148	(a)	19,279
1911-15..	48,612	25,051	12,054	5,389	10,650	-5,658	- 271	- 118	96,487
1916-20..	21,294	985	2,776	3,863	-4,530	-2,211	- 47	- 34	22,190
1921-25..	24,660	19,443	12,154	7,482	6,706	-5,138	- 244	- 744	65,807
1926-30..	33,326	12,532	3,537	- 341	9,363	-4,293	- 278	2,048	56,450
1931-35..	1,093	2,943	1,125	-2,284	- 578	-2,644	- 88	- 47	- 210
1927 ..	10,995	4,947	144	1,143	2,772	- 901	- 47	- 399	19,546
1928 ..	8,354	2,785	180	- 595	2,703	- 865	- 43	- 983	13,502
1929 ..	4,534	905	- 113	-1,473	2,682	- 178	- 248	- 86	7,047
1930 ..	- 904	- 234	760	-1,169	519	- 661	- 62	- 205	-1,422
1931 ..	-2,310	101	959	- 380	- 269	- 201	- 8	- 18	-1,724
1932 ..	765	2	- 495	- 486	- 451	- 38	- 21	- 88	- 770
1933 ..	151	952	58	- 67	- 75	- 549	- 11	- 201	510
1934 ..	1,470	2,753	271	- 717	- 749	-1,733	- 15	- 53	1,257
1935 ..	1,017	- 865	332	- 634	816	- 525	- 71	- 5	217
1936 ..	1,150	- 257	23	- 187	- 236	- 135	- 61	- 127	816

(a) Part of New South Wales prior to 1911.
departures over arrivals.

NOTE.—Minus sign (—) indicates the excess of

POPULATION.—INCREASE BY NET MIGRATION—*continued*.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
PERSONS.									
1901-05..	17,237	-59,955	-1,903	-19,479	50,420	-2,497	- 616	(a)	-16,793
1906-10..	20,547	9,410	20,071	14,993	2,578	-9,807	- 514	(a)	57,278
1911-15..	87,095	26,619	25,091	1,126	10,839	-15,257	1,321	28	136,862
1916-20..	44,444	19,190	6,390	11,783	-8,312	-2,278	- 504	4	70,709
1921-25..	60,320	57,203	30,988	21,726	22,081	-10,768	- 227	1,943	183,266
1926-30..	70,850	20,381	15,121	-2,571	28,432	-7,961	1,148	4,307	129,707
1931-35..	- 553	-3,008	7,320	-5,938	-4,793	-4,028	64	50	-10,886
1927 ..	25,887	11,544	2,144	2,341	9,575	-1,224	507	806	51,580
1928 ..	17,340	3,124	2,685	-3,304	9,660	-1,391	- 354	2,294	30,054
1929 ..	8,475	- 364	1,082	-5,240	6,895	338	538	96	11,820
1930 ..	- 4,233	-2,832	3,116	-3,639	- 453	- 819	190	140	-8,530
1931 ..	- 6,490	-2,334	2,682	-1,579	-2,792	462	- 120	77	-10,094
1932 ..	1,865	- 842	- 183	-1,350	-1,616	- 326	- 66	- 479	-2,997
1933 ..	- 85	156	1,138	- 612	- 140	- 858	19	596	214
1934 ..	2,823	3,831	1,298	-1,439	-1,379	-2,788	98	- 164	2,280
1935 ..	1,334	-3,819	2,385	- 958	1,134	- 518	133	20	- 289
1936 ..	2,253	-1,342	1,253	- 578	- 437	- 167	161	354	1,497

(a) Part of New South Wales prior to 1911.

NOTE.—Minus sign (—) indicates the excess of departures over arrivals.

From 1861 to 1936 the increment to the population arising from net migration amounted to 1,317,029 or 23.27 per cent. of the total increase in population. During the 36 years since 1900 the total increase to the population was made up of 2,480,773 or 81.86 per cent. by natural increase, and 551,040 or 18.14 per cent. by net migration.

There was a loss of population by migration in the first five years of the present century. In the subsequent twenty-five years the increase from migration averaged about 115,000 in each quinquennial period. But in the six years since 1930 there has been a loss of 9,389 by migration.

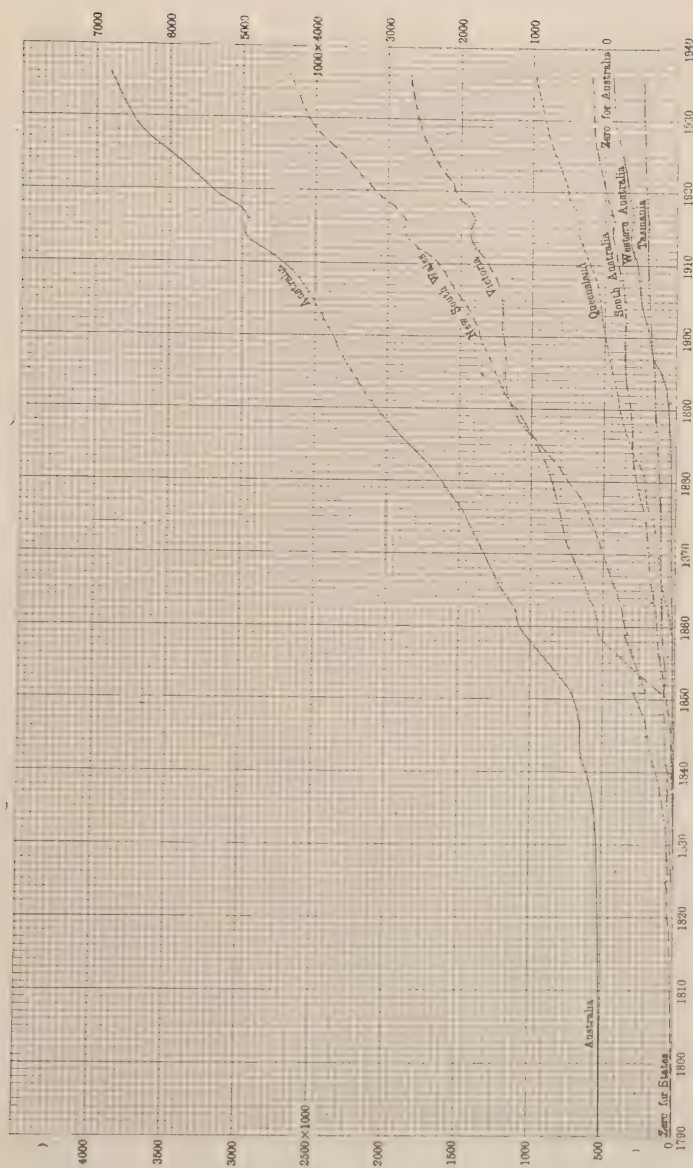
Since the year 1920 a gain in migration has occurred in three years, viz. 1933, 1934 and 1936. The gain in 1934 was only temporary as it was partly due to the arrival of Melbourne Centenary visitors from abroad.

Rates of increase by migration from 1901 to 1930 may be found for each State and Territory of Australia in Australian Demography Bulletin No. 54.

3. **Total Increase.**—The total increase of the population is obtained by the combination of the natural increase with the net migration.

The total increase in each decade from 1861 to 1920 was given in Year Book No. 22, p. 902. The total increment to the population from the beginning of the year 1861 to the end of the year 1930 was 5,001,107, while that from 1901 to 1930 was 3,041,113. The annual results for the last ten years are shown below, and quinquennial figures from 1901 to 1935 are also included. The figures have been adjusted for the years 1921 to 1933 in accordance with the results of the Census of the 30th June, 1933. A graph showing the increase in the population in each State and Territory and of Australia from 1860 accompanies this chapter on pages 328 and 329.

TOTAL POPULATION, 1788 TO 1946.



(See page 315.)

EXPLANATION. — The base of each small square represents one year's interval for the States and Australia and the vertical height for the States 50,000 persons, and for Australia 100,000 persons.

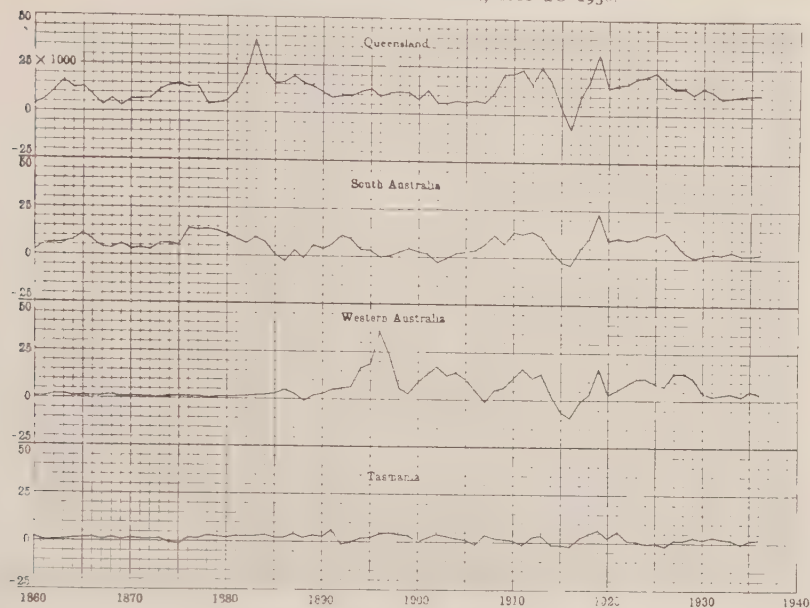
**TOTAL INCREASE OF POPULATION—AUSTRALIA, NEW SOUTH WALES AND
VICTORIA, 1860 TO 1936.**



EXPLANATION.—The base for each small square represents an interval of one year for both States and Australia; the vertical height represents 5,000 persons. In the above graph three zero lines are taken (i) for Australia, (ii) for New South Wales, and (iii) for Victoria. In the second portion of the graph (on page 329) four zero lines are taken (i) for Queensland, (ii) for South Australia, (iii) for Western Australia, and (iv) for Tasmania.

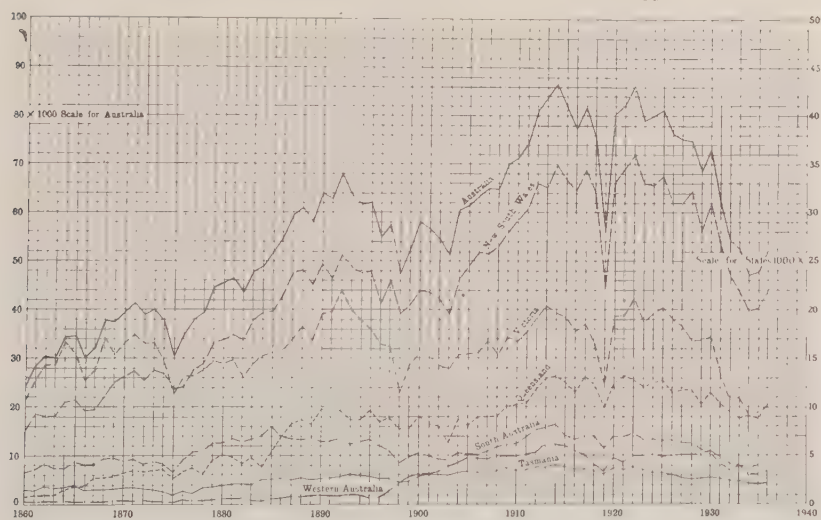
DECREASES in population are shown by carrying the curve in such cases below the zero line, the distance below the zero line indicating the extent of the decrease.

TOTAL INCREASE OF POPULATION—QUEENSLAND, SOUTH AUSTRALIA, WESTERN AUSTRALIA, AND TASMANIA, 1860 TO 1936.



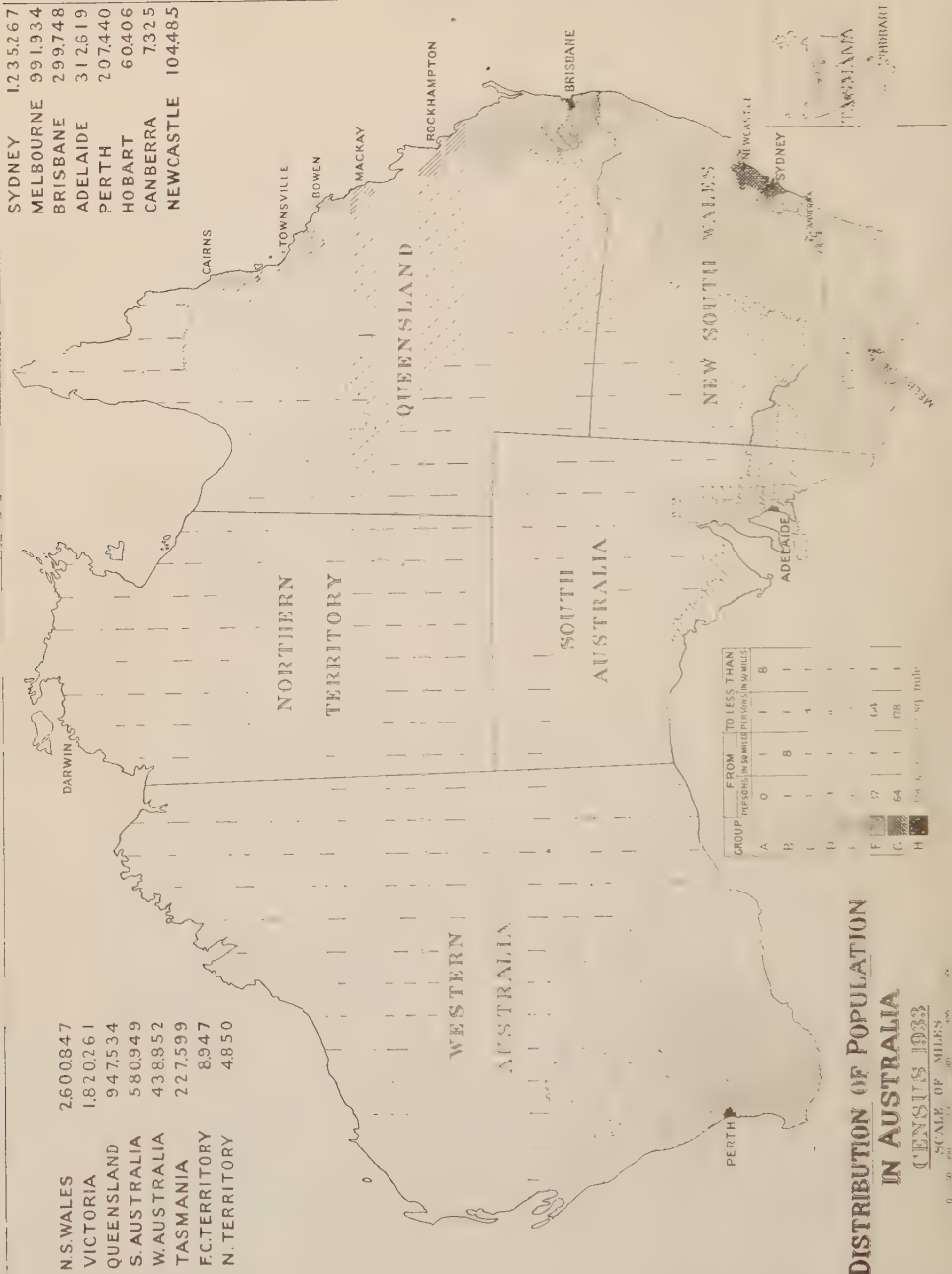
(For explanation see previous page).

NATURAL INCREASE OF POPULATION, 1860 TO 1936.



EXPLANATION.—The base of each small square represents one year for both States and Australia and the vertical height 1,000 persons for the States and 2,000 persons for Australia.

The distances upward from the zero line, marked 0 for both Australia and States, denote the excess of births over deaths. The scale on the left relates to Australia, and that on the right to the States.



POPULATION.—TOTAL INCREASE—1901 to 1936.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
MALES.									
1901-05..	66,850	—3,639	17,123	1,118	36,410	6,184	— 920	(a)	123,126
1906-10..	75,284	48,348	33,706	25,090	11,473	2,919	— 630	(a)	196,190
1911-15..	115,553	47,728	40,534	14,410	12,919	— 213	849	— 12	231,768
1916-20..	95,180	59,593	30,508	24,333	6,005	8,606	— 676	105	223,654
1921-25..	116,520	87,014	47,775	30,965	25,659	2,913	— 51	1,236	312,031
1926-30..	109,954	51,605	37,229	12,353	30,314	3,333	739	2,434	247,961
1931-35..	49,920	19,335	26,822	5,032	4,361	4,426	— 117	273	110,052
1927 ..	29,717	15,683	7,351	4,290	9,054	1,118	423	420	68,056
1928 ..	24,491	8,760	8,004	336	9,221	737	— 338	1,348	52,559
1929 ..	16,987	6,994	5,625	—1,042	6,289	1,494	265	66	36,678
1930 ..	11,178	5,950	7,611	21	1,507	1,261	103	— 4	27,627
1931 ..	8,474	4,007	6,373	779	— 471	1,671	— 137	159	20,855
1932 ..	12,110	4,234	4,584	857	652	891	— 109	— 331	22,888
1933 ..	9,836	4,387	4,952	1,468	1,393	824	17	437	23,314
1934 ..	10,284	5,323	5,037	797	797	61	70	— 69	22,300
1935 ..	9,216	1,384	5,876	1,131	1,990	979	42	77	20,695
1936 ..	11,154	3,715	5,793	1,157	1,475	734	114	282	24,424

FEMALES.

1901-05..	60,729	17,847	20,512	4,253	33,761	7,301	109	(a)	144,512
1906-10..	80,687	42,639	33,828	19,157	15,221	4,499	— 115	(a)	195,916
1911-15..	135,686	75,309	45,517	24,707	26,912	3,946	333	196	312,606
1916-20..	103,093	43,871	35,049	20,688	8,655	6,610	182	38	218,186
1921-25..	114,098	69,128	46,443	25,077	20,545	3,699	— 117	826	279,699
1926-30..	114,059	56,949	34,665	15,066	23,769	2,600	404	2,251	249,763
1931-35..	61,393	31,159	27,161	6,944	11,774	3,309	244	327	142,311
1927 ..	27,260	14,162	6,548	4,415	5,610	458	76	411	58,940
1928 ..	24,983	11,154	6,488	2,621	5,503	431	— 4	1,019	52,195
1929 ..	19,577	9,529	5,634	1,428	5,727	1,465	261	144	43,765
1930 ..	15,482	8,386	6,989	1,473	3,466	758	81	276	36,911
1931 ..	11,487	6,958	6,617	1,833	2,547	1,496	19	43	31,000
1932 ..	13,307	5,583	4,787	1,357	1,982	1,252	49	— 26	28,291
1933 ..	11,952	6,705	4,982	1,916	2,551	679	15	252	29,052
1934 ..	12,400	7,688	5,429	820	1,549	— 724	56	8	27,226
1935 ..	12,247	4,225	5,346	1,018	3,145	606	105	50	26,742
1936 ..	12,916	5,048	5,622	1,712	2,337	1,293	100	186	29,214

PERSONS.

1901-05..	127,579	14,208	37,635	5,371	70,171	13,485	— 811	(a)	267,638
1906-10..	155,971	90,987	67,534	44,247	26,694	7,418	— 745	(a)	392,106
1911-15..	251,230	123,037	86,051	39,117	39,831	3,733	1,182	184	544,374
1916-20..	198,273	103,464	65,557	45,021	14,660	15,216	— 494	143	441,840
1921-25..	230,618	156,142	94,218	56,042	46,204	6,612	— 168	2,062	591,730
1926-30..	224,013	108,554	71,894	27,419	54,083	5,933	1,143	4,685	497,724
1931-35..	111,313	50,494	53,983	11,976	16,135	7,735	127	600	252,363
1927 ..	56,977	29,845	13,899	8,705	14,664	1,576	499	831	126,996
1928 ..	49,474	19,914	14,492	2,957	14,724	1,168	— 342	2,367	104,754
1929 ..	36,564	16,523	11,259	386	12,016	2,959	526	210	80,443
1930 ..	26,660	14,336	14,600	1,494	4,973	2,019	184	272	64,538
1931 ..	19,961	10,965	12,990	2,612	2,076	3,167	— 118	202	51,855
1932 ..	25,417	9,817	9,371	2,214	2,634	2,143	— 60	357	51,179
1933 ..	21,788	11,092	9,934	3,384	3,944	1,503	32	680	52,366
1934 ..	22,684	13,011	10,466	1,617	2,346	— 663	126	— 61	49,526
1935 ..	21,463	5,609	11,222	2,149	5,135	1,585	147	127	47,437
1936 ..	24,070	8,763	11,415	2,860	3,812	2,027	214	468	53,638

(a) Part of New South Wales prior to 1911.

NOTE.—Minus sign (—) denotes decrease.

4. Rates of Increase.—(i) *States.* The annual rates of increase of population of the several States of the Commonwealth in each of the years 1932 to 1936 inclusive were as follows:—

POPULATION.—RATES OF INCREASE.
(AUSTRALIAN STATES.)

State or Territory.	Annual Rate of Increase of Population.				
	1932.	1933.	1934.	1935.	1936.
	%	%	%	%	%
New South Wales ..	0.99	0.84	0.87	0.81	0.91
Victoria ..	0.54	0.61	0.71	0.31	0.48
Queensland ..	1.01	1.06	1.10	1.17	1.18
South Australia ..	0.38	0.58	0.28	0.37	0.49
Western Australia ..	0.61	0.90	0.53	1.16	0.85
Tasmania ..	0.94	0.65	—0.29	0.68	0.87
Northern Territory ..	—1.24	0.67	2.62	2.97	4.20
Federal Capital Territory ..	—4.00	8.05	—0.66	1.38	5.02
Australia ..	0.78	0.79	0.74	0.71	0.79

NOTE.—Minus sign (—) denotes decrease.

(ii) *Various Countries.* The table hereunder gives approximate rates of increase of the population of Australia and its component States, in comparison with those for other countries. The Australian rates for the periods 1921–26 and 1926–31 have been adjusted in accordance with the results of the 1933 Census.

POPULATION.—RATES OF INCREASE.
(VARIOUS COUNTRIES.)

Country.	Annual Rate of Increase of Population during period—						
	1901 to 1906.	1906 to 1911.	1911 to 1916.	1916 to 1921.	1921 to 1926.	1926 to 1931.	1931 to 1936.
	%	%	%	%	%	%	%
AUSTRALASIA—							
Australia ..	1.38	2.03	1.95	1.99	2.11	1.50	0.76
New South Wales(a) ..	1.99	2.03	2.01	2.17	2.20	1.74	0.87
Victoria ..	0.18	2.17	1.38	1.68	2.00	1.18	0.53
Queensland ..	1.35	2.76	2.20	2.21	2.38	1.53	1.14
South Australia (b) ..	0.27	2.46	1.52	2.34	2.17	0.81	0.41
Western Australia ..	6.22	2.43	1.76	1.27	2.66	2.56	0.81
Tasmania ..	1.33	0.65	0.58	1.84	0.04	1.01	0.53
New Zealand ..	2.86	2.56	1.61	2.32	1.95	1.25	0.92
EUROPE—							
England and Wales ..	1.04	1.04	0.05	1.80	0.62	0.47	1931–35. 0.41
Scotland ..	0.55	0.56	0.31	0.24	0.09	—0.21	0.56
Ireland ..	—0.22	—0.06	—0.21	0.58	—0.60	—0.12	0.44
Belgium ..	1.26	0.69	0.54	—0.56	1.03	0.71	0.43
Denmark ..	1.12	1.26	1.20	2.13	1.01	0.67	0.79
France ..	0.15	0.06	—0.72	0.55	0.76	0.53	0.05
Germany ..	1.46	1.36	0.71	—1.62	0.73	0.42	0.55
Italy ..	0.52	0.80	1.16	0.22	0.91	0.31	0.98
Netherlands ..	1.53	1.22	1.72	1.16	1.53	1.06	1.30
Norway ..	0.52	0.00	1.00	1.14	0.90	0.28	0.48
Spain ..	0.52	0.87	0.66	0.82	0.65	0.89	1.08
Sweden ..	0.61	0.84	0.70	0.64	0.40	0.22	0.35
Switzerland ..	1.28	1.17	0.81	0.01	0.38	0.62	0.47
ASIA—							
Ceylon ..	1.62	1.20	1.71	1.28	2.30	1.18	1.43
Japan ..	1.29	1.08	1.42	0.37	1.42	1.48	1.47
AMERICA—							
Canada ..	2.99	2.99	2.20	1.81	1.33	1.97	1.35
United States ..	2.00	1.82	1.67	1.21	1.67	1.26	0.70

(a) Including Federal Capital Territory.

(b) Including Northern Territory.

NOTE.—Minus sign (—) denotes decrease.

(iii) *Variations in the rates.* The annual rate of increase of the population during the present century has averaged 1.66 per cent., but the results from year to year have deviated widely from this figure. In the following table the period from 1900 to 1936 has been arranged into certain defined groups of years according to the occurrence of influences seriously affecting the growth of population:—

POPULATION.—RATES OF INCREASE.

(VARIOUS PERIODS.)

Period from 1st December.	Interval	Increase during Period.	Average Annual Increase.	Average Annual Rate of Increase.		
				Natural Increase.	Net Migration.	Total.
	Years.	Million.	Thousand.	%	%	%
1900 to 1913 ..	13	1.13	87	1.59	0.53	2.04
1913 to 1923 ..	10	0.86	86	1.50	0.15	1.64
1923 to 1929 ..	6	0.68	113	1.27	0.64	1.88
1929 to 1936 ..	7	0.37	53	0.84	-0.04	0.80

NOTE.—Minus sign (–) denotes decrease.

Up to 1913 the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration in the years immediately before the war, was responsible for the comparatively high annual rate of 2.04 per cent. during the pre-war years. The war was a dominating influence in the decade 1913–1923, and its effects can be seen in the reduction of the rate from 2.04 to 1.64 per cent. In the next span from 1923 to 1929 a more settled and prosperous era was experienced; migration was resumed on a large scale and, despite a further decline in the rate of natural increase owing to the persistent fall in the birth rate since the war, the annual rate of growth rose to 1.88 per cent. After 1929 came the depression. Immigration ceased; in fact Australia actually lost 17,919 people through an excess of departures over arrivals from 1929 to 1936. With so much unemployment the rate of natural increase fell, and the population of Australia progressed at the low rate of 0.8 per cent. per annum.

If the population increased at the average rate of the present century, viz., 1.66 per cent., it would double itself in 42 years. It has been estimated, however, on the assumptions that the present birth and death rates remain unchanged and that no increment to the population results from migration, that the annual rates of natural increase would be for the period 1933–43, 0.64 per cent.; 1933–53, 0.55 per cent.; 1933–63, 0.45 per cent. and 1933–73, 0.33 per cent. In this respect the experience in Australia would be very similar to that of many other countries as the result of the low birth-rate.

Rates of increase from 1901 to 1936 may be found for each State and Territory of Australia in Australian Demography Bulletin No. 54.

§ 6. Seasonal Variations of Population.

1. *Variations in Natural Increase.*—The following notes are based on the experience of the ten years 1927–1936. For Australia as a whole the rate of natural increase was greatest in the quarter ended March, and least in the quarter ended September. In New South Wales, Victoria, South Australia and Tasmania the March quarter was the most favourable, and in Queensland and Western Australia the June quarter. The natural increase was lowest in New South Wales, Victoria, Queensland, South Australia and Western Australia in the September quarter, and in Tasmania in the June quarter.

2. **Variations in Net Migration.**—For the decade 1927-1936 for Australia as a whole the quarter ended December showed the greatest rate of increase from migration. The greatest gains in New South Wales have on the average occurred in the September quarter, in Victoria in the March quarter, in Queensland and Western Australia in the June quarter, and in South Australia and Tasmania in the December quarter. The gain to the southern States in the quarter ended December is due to oversea traffic and to tourists and sugar workers returning from Queensland, which State loses heavily during the December quarter, but gains in the June quarter by tourists seeking the warmer climate. The increase to Tasmania during the quarter ended December is due to the influx of tourists from the mainland.

§ 7. Influences affecting Increase and Distribution.

In previous issues of the Official Year Book the influence of the various factors affecting the growth and distribution of population was traced. Detailed information on this subject will be found in Official Year Book No. 22, pp. 906 and 907.

§ 8. Density.

1. **General.**—From certain aspects population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,974,581 square miles, and a population on 31st December, 1936, of 6,800,450, including 53,698 full-blood aborigines, has a density of only 2.31 persons to the square mile, and is, therefore, the most sparsely populated of the civilized countries of the world. For the other continents the densities are approximately as follows:—Europe, 118; Asia, 72; Africa, 12; North and Central America, 20; and South America, 13. The population of Australia has thus about one-sixth of the density of South America and of Africa; about one-ninth of that of North and Central America; about one thirtieth of that of Asia; and about one fiftieth of that of Europe.

On account of the enormous area of Australia the density of population must necessarily increase slowly. In Australia as a whole the figure has increased from 1.29 per square mile in 1901 to 2.31 in 1936. Victoria's density, however, has grown from 13.77 to 21.07, and that of New South Wales from 4.43 to 8.67 in the same period.

A map showing the density of population throughout Australia at the Census of 1933 appears on page 330 of this chapter. When comparing the density of population of the several States consideration should be given to the average annual rainfall distribution in each State as an indication of the climatic influence upon probable population numbers. The area of New South Wales receiving less than 10 inches of rainfall is 16 per cent; Victoria, nil; Queensland, 12 per cent; South Australia, 82 per cent; Western Australia, 50 per cent; Tasmania, nil; and Australia, 36 per cent.

Particulars concerning the number and density of the population of the most important countries of the world at the 31st December, 1935, are given in the following table. These figures have been taken, with the exception of those for China, Afghanistan, Iran and Australia, from the *Statistical Year Book of the League of Nations*, 1935-36. The figures for the excepted countries other than Australia were taken from the *Statesman's Year Book*, 1936. In some instances, more particularly in the cases of Asia and Africa, the numbers must be considered as rough approximations only.

POPULATION OF THE WORLD.—NUMBER AND DENSITY.—1935.

Country.	Population. (ooo omitted)	Density. (a)	Country.	Population. (ooo omitted)	Density. (a)
EUROPE.			AFRICA.		
Russia (European) ..	136,500	58.9	Nigeria and Protectorate (c) ..	20,131	54.0
Germany	67,105	370.0	Egypt	15,281	39.6
Great Britain and North- ern Ireland	46,992	497.2	French West Africa	14,400	8.0
Italy	42,621	356.1	Belgian Congo	10,000	10.9
France	41,900	196.9	Union of South Africa	8,488	18.0
Poland	33,418	223.1	Algeria	6,910	8.1
Spain (including Canary and Balearic Islands) ..	24,242	124.8	Anglo-Egyptian Sudan	5,720	5.9
Rumania	18,800	165.1	Abyssinia	5,500	15.8
Czechoslovakia	15,057	278.5	Other	58,650	10.8
Yugoslavia	14,730	153.8			
Hungary	8,805	247.7	Total Africa	145,089	12.5
Netherlands	8,332	639.2	NORTH AND CENTRAL AMERICA.		
Belgium	8,248	712.1	United States of America ..	126,000	41.6
Portugal	7,177	201.2	Mexico	17,600	23.1
Austria	6,760	208.4	Canada	10,835	2.9
Greece	6,630	132.1	Cuba	4,075	92.6
Sweden	6,212	357.8	Other	15,309	13.5
Bulgaria	6,090	153.1	Total North and Central America	173,819	20.1
Switzerland	4,153	262.3	SOUTH AMERICA.		
Denmark	3,681	214.7	Brazil	44,900	13.6
Finland	3,534	23.6	Argentine Republic	12,164	11.3
Irish Free State	3,013	113.1	Colombia	9,225	20.6
Norway	2,871	23.0	Peru	6,700	13.9
Other	9,716	63.6	Chile	4,465	15.6
			Other	11,704	8.2
Total Europe	526,737	129.6	Total South America	89,158	12.7
ASIA.			OCEANIA, ETC.		
China and Dependencies ..	489,309	114.1	Australia (b)	6,807	2.3
British India :			New Zealand	1,585	15.2
British Provinces	271,475	247.7	Territory of New Guinea ..	520	5.6
Feudatory States	81,311	114.1	Hawaii	379	57.7
Japan and Dependencies ..	97,045	370.3	Papua	280	3.1
Dutch East Indies	63,500	110.5	Fiji	193	26.3
Russia in Asia	36,500	6.3	Other	551	3.0
Turkey, including Armenia and Kurdistan (d)	14,050	49.2	Total Oceania, etc.	10,315	3.0
Philippine Islands	13,055	114.2	SUMMARY.		
Siam	12,743	63.7	Europe	520,745	118.1
Afghanistan	12,000	47.8	Asia	1,156,321	72.2
Iran	10,000	15.9	Africa	145,089	12.5
Tongking	8,096	183.9	America, North and Central ..	173,819	20.1
Arabia	7,000	7.0	America, South	89,158	12.7
Nepal	5,600	103.6	Oceania, etc.	10,315	3.0
Ceylon	5,463	214.4			
Annam	5,122	91.5			
Other	25,052	44.2			
Total Asia	1,157,321	72.3	Total	2,102,439	41.1

(a) Number of persons per square mile. (b) Including 54,000 full-blood aborigines and adjusted in accordance with the figures of the Census of the 30th June, 1933. (c) Including British Cameroons. (d) Excludes European Territory—1,150,000.

2. Position of the British Empire.—The approximate relationship of the British Empire to the world as a whole in regard to its area and population is given hereunder :—

BRITISH EMPIRE IN RELATION TO THE WORLD.

Particulars.	The World. (a)	British Empire. (a)
Area in square miles (exclusive of Polar Circles) ..	51,115,000	13,355,426
Population	2,095,447,000	495,764,000
Population per square mile	41.00	37.12

(a) Statistical Year Book of the League of Nations, 1935-36, and The Statesman's Year Book, 1936.

§ 9. General Characteristics.

1. Sex Distribution.—(i) General. Detailed information respecting the distribution of the sexes in the population of Australia will be found in previous issues of the Official Year Book. (See No. 22, page 910.)

(ii) *Masculinity*.—(a) *States*. The number of males to each hundred females has been adopted as the "masculinity" of the population. On pages 163 to 165 in the second issue of this publication a table was included showing the masculinity of the population of each of the States for each year from 1796 to 1907. In the fifth issue, on page 123, the figures in this table for the years 1901 to 1907 were modified in accordance with the results of the Census of 3rd April, 1911.

With the exception of some dislocation arising from the war there has been a continuous diminution of the masculinity of the population. In 1900, the masculinity was 110.55; in 1910, 107.87 and in 1920, 103.47. After 1921, however, the masculinity tended to rise until 1927 (104.54) since when it has gradually fallen to 102.55 in the year 1936.

The following table shows the masculinity of the population at quinquennial periods from 1901 to 1930 and for each year from 1930 onwards:—

POPULATION.—MASCULINITY, 1901 to 1936.

(Males per 100 Females.)

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia
1901 ..	110.12	101.16	125.78	102.71	155.69	107.90	593.32	..	110.15
1905 ..	111.05	97.69	121.75	101.65	141.35	106.09	496.76	..	108.65
1910 ..	109.23	98.71	119.02	103.12	132.90	104.14	486.32	(a)	107.87
1915 ..	105.66	95.07	114.74	98.26	117.23	99.77	400.33	109.75	103.55
1920 ..	104.31	97.38	112.00	99.83	114.55	101.67	270.04	116.70	103.47
1925 ..	104.09	99.71	110.94	102.02	115.76	100.90	297.61	132.37	104.24
1930 ..	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1931 ..	103.12	98.82	110.44	100.60	115.45	101.67	250.14	121.36	103.50
1932 ..	103.00	98.68	110.29	100.42	114.65	101.33	233.98	113.89	103.30
1933 ..	102.81	98.44	110.17	100.26	113.91	101.45	232.73	117.41	103.09
1934 ..	102.62	98.19	109.96	100.25	113.44	102.15	228.72	115.57	102.92
1935 ..	102.36	97.90	109.96	100.29	112.69	102.46	216.41	116.02	102.71
1936 ..	102.21	97.77	109.88	100.10	112.15	101.95	210.42	117.49	102.55

(a) Part of New South Wales prior to 1911.

(b) *Various Countries*. The difference between young and old countries in the masculinity of their populations is clearly illustrated by the comparisons furnished in the following table, which are based on the latest statistics available:—

POPULATION.—MASCULINITY.

(VARIOUS COUNTRIES.)

Country.	Year.	Number of Males to each 100 Females.	Country.	Year.	Number of Males to each 100 Females.
Argentine Republic ..	1928	114.1	Hungary ..	1930	95.8
Canada ..	1931	107.4	Italy ..	1931	95.7
Irish Free State ..	1934	103.9	Denmark ..	1930	95.7
Union of South Africa (a)	1932	103.5	Spain ..	1930	95.3
New Zealand ..	1936	103.1	Norway ..	1930	95.1
Australia ..	1936	102.6	Northern Ireland ..	1935	94.9
United States of America	1930	102.5	Germany ..	1933	94.3
Japan ..	1935	100.6	Russia ..	1926	93.5
Netherlands ..	1934	99.1	Poland ..	1921	93.4
Belgium ..	1934	97.9	Scotland ..	1935	92.9
Yugoslavia ..	1931	97.9	France ..	1931	92.3
Sweden ..	1934	97.7	England and Wales ..	1935	92.2

(a) White population only.

2. *Age Distribution*.—The age distribution of the population is obtained only at a Census. The following table shows the variation which has taken place in the age constitution of the population during the 12½ years since the 1921 Census. There are regular wave-like movements in the increments to the numbers in the several age groups. These movements are due to the gradual decline in the birth-rate and to the age constitution of the net increment of immigrants during the intercensal period. The curve of age constitution for the 1921 Census showed definite troughs in the age group 0 to 4 years owing to the decline in the birth-rate during the war years, and in the group 20 to 24 years due to the decline in the birth-rate in the late nineties of last century

and to the loss of young adult males during the war of 1914-1919. At the 1933 Census these same troughs are still prominent, but owing to the lapse of time they now show at the later ages of 12 to 16 years and 32 to 36 years. Another depression has appeared in the age group 0 to 4 years, which makes an even greater trough in the age constitution curve than that caused by the war. This is due to the serious decline in the birth-rate, which has been exaggerated by the recent economic dislocation. Marriages have been postponed and births have diminished.

Of the 6,610,996 persons for whom age was stated at the 1933 Census, 8.6 per cent. were under 5 years of age; 9.5 per cent. were 5 years of age and under 10 years; 9.5 per cent. from 10 to 14 years; 9.3 per cent. 15 to 19 years; and 38.6 per cent. were under age 21. At the 1921 Census 11.1 per cent. were under 5 years; 11.0 per cent. 5 to 9 years; 9.8 per cent. 10 to 14 years; 8.5 per cent. 15 to 19 years; and 42.1 per cent. under 21 years of age. It will be seen that there has been a considerable decrease in the percentage under 5 years of age, a smaller decrease in the percentage between 5 and 9 years, and a heavy decrease in the percentage under age 21.

The effect of the falling birth-rate on the number of young lives in the population is indicated in some degree by comparing the experience during the intercensal period from 1921 to 1933 with that for the previous intercensal period from 1911 to 1921. Whereas during the earlier period of ten years the population under 10 years of age in Australia increased by 217,085 persons, yet in the subsequent 12½ years, 1921 to 1933, the increment to the numbers in this age-group was only 381. Had the average effective birth-rate which prevailed between the Censuses of 1911 and 1921 continued until the 30th June, 1933, there would have been about 350,000 more children under 10 years of age in Australia than were actually enumerated at the Census.

On the other hand, the number of persons aged 65 years and over in Australia at the 30th June, 1933, was 188,630 more than at the previous Census, as compared with an increase of 48,813 during the previous intercensal period from 1911 to 1921.

POPULATION.—AGE DISTRIBUTION—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Age last Birthday.	Census 1921.			Census 1933.			Increase 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Years.							
0-4	305,522	294,684	600,206	290,461	278,504	568,965	-31,241
5-9	301,573	294,185	595,758	318,937	308,443	627,380	31,622
10-14	268,003	261,037	529,040	317,526	307,696	625,222	96,182
15-19	233,956	228,472	462,428	310,491	302,505	612,996	150,568
20-24	219,830	232,481	452,311	296,756	285,564	582,320	130,009
25-29	224,525	236,193	460,718	276,304	255,570	531,874	71,156
30-34	226,883	220,732	447,615	250,464	236,796	487,260	39,645
35-39	196,356	189,281	385,637	227,703	230,628	458,331	72,694
40-44	169,562	160,654	330,216	228,862	225,642	454,504	124,288
45-49	144,184	135,173	279,357	208,450	198,660	407,110	127,753
50-54	135,563	119,493	255,056	170,996	162,179	333,149	78,093
55-59	115,876	99,206	215,082	131,764	128,387	260,151	45,069
60-64	99,276	75,428	174,704	114,378	113,330	227,708	52,004
65-69	55,880	48,724	104,604	92,561	90,167	182,728	78,124
70-74	33,232	31,714	64,946	65,743	64,049	129,792	64,846
75-79	19,526	20,347	39,873	35,771	36,123	71,894	32,021
80-84	9,549	10,330	19,879	13,803	15,680	29,483	9,604
85-89	3,623	4,208	7,831	4,621	6,212	10,833	3,002
90-94	880	1,061	1,941	1,143	1,601	2,744	803
95-99	126	160	286	184	305	489	203
100 and over	25	11	36	31	32	63	27
Not Stated	7,920	6,290	14,210	10,188	8,655	18,843	4,633
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105
Under 21 years	1,155,526	1,125,861	2,281,387	1,208,625	1,256,482	2,555,107	273,720
21 years and over	1,599,424	1,549,713	3,149,137	2,158,486	1,997,591	4,156,077	1,016,752
Not Stated	7,920	6,290	14,210	10,188	8,655	18,843	4,633
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

Owing to the striking changes which are taking place in the age distribution of the population of Australia, consequent upon the lower birth rate and the increasing expectation of life, efforts have been made to estimate the age distribution in each year since the 1933 Census by tabulating the recorded particulars for births, ages at death, and ages of arrivals and departures from Australia each year, in conjunction with the age distribution as shown at the 1933 Census. The results of this tabulation are shown in the following summary.

**POPULATION.—ESTIMATED AGE DISTRIBUTION—AUSTRALIA, 1934, 1935
AND 1936.**

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Age last Birthday.	1934.		1935.		1936.	
	Males.	Females.	Males.	Females.	Males.	Females.
Years—						
0-4 ..	280,484	269,123	272,442	262,082	267,772	257,403
5-9 ..	317,177	306,037	312,690	300,442	307,389	295,421
10-14 ..	322,586	312,655	325,976	316,980	323,357	314,586
15-19 ..	306,492	297,705	303,189	293,644	308,412	298,555
20-24 ..	303,388	293,579	307,252	299,302	309,502	301,658
25-29 ..	281,143	262,648	284,233	267,410	286,837	273,073
30-34 ..	258,252	240,308	258,907	239,132	259,225	238,824
35-39 ..	225,493	232,668	231,455	233,971	241,441	237,362
40-44 ..	231,715	231,422	231,341	235,052	224,847	232,208
45-49 ..	212,656	204,325	215,639	208,182	223,556	217,024
50-54 ..	177,334	167,201	183,373	173,760	183,961	176,291
55-59 ..	137,375	133,712	142,140	137,996	150,668	145,475
60-64 ..	113,855	114,115	114,194	115,074	113,907	115,039
65-69 ..	94,141	93,305	96,077	95,770	97,111	99,165
70-74 ..	67,672	66,391	68,890	68,731	69,008	69,617
75-79 ..	37,668	38,943	40,030	41,930	42,615	44,693
80-84 ..	14,380	16,011	15,290	16,899	16,290	17,927
85-89 ..	4,731	6,378	4,933	6,625	5,042	6,777
90-94 ..	1,158	1,654	1,092	1,693	1,126	1,763
95-99 ..	174	289	164	260	167	206
100 and over ..	27	27	29	33	26	34
Total ..	3,387,901	3,288,496	3,409,336	3,314,968	3,432,259	3,343,101
Under 21 years	1,290,095	1,247,603	1,278,121	1,235,752	1,268,037	1,225,001
21 years and over	2,097,806	2,040,893	2,131,215	2,079,216	2,164,222	2,118,100
Total ..	3,387,901	3,288,496	3,409,336	3,314,968	3,432,259	3,343,101

The next table shows the change which has been taking place in the age constitution of the population of Australia since the year 1871. Each successive Census except 1921 has revealed a larger percentage of the population over 15 years of age than was recorded at the previous Census. This movement, as previously mentioned, was greatly accentuated during the period 1921 to 1933 owing to the serious decline in the birth-rate which was partly the outcome of the recent economic dislocation. This change has resulted during the intercensal period in an increase in the average age of males in Australia from 28.54 to 30.44 years and of females from 28.29 to 30.62 years. Not only has there been an increase in

the average age of both sexes but also a steady approach to similarity in the age composition of males and females in harmony with the equalization of the numbers of each sex in Australia.

POPULATION.—AGE DISTRIBUTION—AUSTRALIA, 1871 to 1933.

Census Year.	Males.				Females.				Persons.			
	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.
	%	%	%	%	%	%	%	%	%	%	%	%
1871	38.84	59.11	2.05	100	46.02	52.00	1.38	100	42.09	56.17	1.74	100
1881	30.37	60.85	2.78	100	41.89	56.07	2.04	100	38.91	58.65	2.44	100
1891	34.77	62.02	3.21	100	39.30	58.08	2.56	100	36.90	60.20	2.90	100
1901	33.87	61.82	4.31	100	30.50	59.85	3.65	100	35.12	60.88	4.00	100
1911	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933	27.61	66.02	6.37	100	27.49	65.93	6.58	100	27.55	65.97	6.48	100

3. **Conjugal Condition.**—Of the total population of Australia at the 1933 Census, 55.5 per cent. had never married; 39.2 per cent. were married; 5.0 per cent. widowed; and 0.3 per cent. divorced. Since the year 1921 the number never married has increased by 15.4 per cent.; those married by 29.8 per cent.; the widowed by 37.9 per cent.; and the divorced by 148 per cent.

The relatively low rate of increase in the number of single persons under age 15 is another symptom of the falling birth-rate. At the 30th June, 1933, the number of males aged 15 years and over who had never married was 193,139 more than the females and the excess of males was 40,721 greater than at the previous Census.

The marriage rate for Australia declined from 9.6 per 1,000 of population in the year 1920 to 7.0 per 1,000 of population in the year 1933. The divorce rate for the period 1911–1920 was 8.1 per 10,000 existing marriages, but increased to nearly double (15.5) during the decennium 1921–1930. During the intercensal period widowed females increased in number by 63,700, and at a higher percentage rate of increase (39.9) than the widowed males (33.3) during the same period. Actually there were more than twice as many widowed females as widowed males in Australia at the 30th June, 1933. The greater number of widowed females than widowed males is the result of two influences. The first is the greater longevity of married females coupled with the usually younger age at marriage; and the second is that a larger proportion of males cancel their widowhood by remarriage.

POPULATION.—CONJUGAL CONDITION—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Conjugal Condition.	Census 1921.			Census 1933.			Increase 1921–1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Never Married—							
Under age 15 ..	875,098	849,906	1,725,004	926,924	894,643	1,821,567	96,563
Age 15 and over ..	801,797	649,379	1,451,176	1,018,587	825,448	1,844,035	392,859
Total ..	1,676,895	1,499,285	3,176,180	1,945,511	1,720,091	3,665,602	489,422
Married ..	999,274	999,388	1,998,662	1,299,693	1,293,922	2,593,615	594,953
Widowed ..	73,341	104,480	237,821	97,775	230,180	327,955	90,134
Divorced ..	4,230	4,298	8,528	10,251	10,862	21,113	12,585
Not Stated ..	9,130	5,413	14,543	13,881	7,673	21,554	7,011
Total ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

4. **Dependent Children under 16 years of Age.**—In reply to this question, 804,695 males and 61,417 females stated they had children under 16 years of age dependent on them at the 30th June, 1933, the total number of dependent children under age 16 claimed being 1,919,859, of whom 1,811,247 or 94.3 per cent. were dependent on males and 108,612 or 5.7 per cent. were dependent on females. This represents an average of 2.3 for each male with dependent children and 1.8 for each female with dependent children. For each adult male in Australia there was an average of 0.88 dependent children, and for each male breadwinner (excluding pensioners) an average of 0.81 dependent children under 16 years of age.

Thirty-eight per cent. of the males with dependent children under 16 years of age had one dependent child; 29 per cent. two children; 16 per cent. three children; 9 per cent. four children; 4 per cent. five children; and 4 per cent. more than five children. Of the females with dependent children under 16 years of age, 57 per cent. had one dependent child; 24 per cent. two children; 11 per cent. three children; 5 per cent. four children; 2 per cent. five children; and 1 per cent. more than five children.

POPULATION.—PERSONS WITH DEPENDENT CHILDREN UNDER SIXTEEN YEARS OF AGE—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Number of Dependent Children.	Number of Persons with Dependent Children.			Total Number of Children Dependent on.—		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1	306,695	34,823	341,518	306,695	34,823	341,518
2	233,167	14,631	247,798	466,334	29,262	495,596
3	131,646	6,724	138,370	394,938	20,172	415,110
4	69,485	3,067	72,552	277,940	12,268	290,208
5	34,676	1,337	36,013	173,380	6,685	180,065
6	17,270	557	17,827	103,620	3,342	106,962
7	7,497	185	7,682	52,479	1,295	53,774
8	2,931	75	3,006	23,448	600	24,048
9	964	15	979	8,676	135	8,811
10	281	3	284	2,810	30	2,840
11	69	..	69	759	..	759
12	14	..	14	168	..	168
Total ..	804,695	61,417	866,112	1,811,247	108,612	1,919,859

5. **Orphanhood.**—The number of children under 16 years of age in Australia at the 30th June, 1933, totalled 1,941,050, of whom 51 per cent. were males and 49 per cent. females. Of all children for whom particulars were stated, 94.0 per cent. had both parents living; 3.6 per cent. were without father living; 2.1 per cent. without mother; and 0.3 per cent. were bereft of both parents.

The number of fatherless children is much greater than the number without mothers. For every two children who are motherless there are approximately four who are fatherless. This is due to the higher rate of mortality amongst males of middle age as compared with females. The ratio of children without one or both parents to the total children enumerated is the same for both boys and girls.

POPULATION.—ORPHANHOOD OF CHILDREN UNDER SIXTEEN YEARS OF AGE—
AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Particulars.	Males.	Females.	Persons.
Both Parents Living	915,707	884,174	1,799,881
Father Dead	34,642	33,998	68,640
Mother Dead	20,204	19,642	39,846
Both Parents Dead	3,144	2,713	5,857
Not Stated	13,813	13,013	26,826
Total	987,510	953,540	1,941,050

6. **Schooling.**—The total number of children at the ages 6 to 14 years inclusive in Australia at the 30th June, 1933, was 1,127,691. The number receiving instruction at Government schools at the date of the Census totalled 904,383, or 77 per cent.; those attending private schools numbered 224,994, or 19 per cent.; and 33,126 children or 3.0 per cent., were stated to be receiving instruction at home. Since the 1921 Census the number attending Government schools has increased by 14 per cent., while those attending private schools increased by 16 per cent.

POPULATION.—SCHOOLING—PERSONS RECEIVING INSTRUCTION AT DATE OF
THE CENSUS—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Receiving Instruction at—	Census 1921.			Census 1933.			Increase 1921— 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Government School	413,035	378,689	791,724	474,987	430,206	904,383	112,659
Private School ..	88,800	104,974	193,774	107,091	117,903	224,994	31,220
University ..	5,129	2,123	7,252	6,252	2,273	8,525	1,273
Home ..	14,141	16,571	30,712	16,623	16,503	33,126	2,414
Total ..	521,105	502,357	1,023,462	604,053	566,975	1,171,028	147,566

7. **War Service.**—This inquiry was restricted to those who served with the Australian Forces during the Great War of 1914-19. The numbers recorded at the Census of the 30th June, 1933, as having served abroad were 220,438 males and 1,544 females, 11 per cent. of the adult male population of Australia being ex-members of the Australian Forces with oversea service.

Of this number 4,339 served with the naval forces, so that the number of ex-members of the A.I.F. in Australia at the 30th June, 1933, was 222,099. According to official records, 265,000 members of the A.I.F. were discharged in Australia upon return from service overseas, but, as this figure included duplications for those persons who enlisted on more than one occasion and consequently were discharged on more than one occasion,

a special detailed examination of A.I.F. records at the Defence Department, Melbourne, was made in order to ascertain the number of individuals who were discharged upon return to Australia. This inquiry disclosed that 257,519 soldiers and 1,665 nurses returned to Australia and that 7,030 soldiers and nurses were discharged overseas. At the 1933 Census the number recorded in Australia totalled 222,099, which shows a reduction of 35,420, or 13.75 per cent., in the number of returned soldiers since their return to Australia.

The particulars ascertained from the 1933 Census and as the result of the special statistical inquiry instituted at Base Records, Department of Defence, were referred to Mr. F. W. Barford, A.I.A., Actuary of the Commonwealth Superannuation Board. Although it was not possible from this data to construct a Life Table comparable to the Australian Life Tables of 1933 it was possible to make some comparison between the two experiences—national and returned soldiers. As the result of these calculations it was ascertained that the mortality amongst returned soldiers since discharge exceeds that of a body of males of the same age constitution drawn from the general population by about 13 per cent.

POPULATION.—WAR SERVICE—PERSONS WHO SERVED ABROAD WITH THE
AUSTRALIAN FORCES IN THE WAR OF 1914-1919—CENSUS 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

State or Territory.	Metro- politan.	Provincial.	Rural.	Migratory.	Total.
New South Wales	44,681	14,676	23,681	237	83,275
Victoria	38,116	6,098	23,273	102	67,589
Queensland	11,215	5,411	13,397	186	30,209
South Australia	11,953	1,484	6,658	73	20,168
Western Australia	8,995	1,662	8,482	87	19,226
Tasmania	2,286	1,619	2,959	43	6,907
Federal Capital Territory ..	..	541	64	..	605
Northern Territory .. ..	..	66	237	..	393
Total	117,246	31,557	78,751	728	228,282

8. Religion.—At the 1921 Census 92,258 persons in Australia, or 1.7 per cent., gave no reply to this question, but at the 1933 Census, when the public was informed there was no legal obligation to answer this question, 848,948 persons, or 12.8 per cent., gave no reply. Thus 14.0 per cent. of the male and 11.5 per cent. of the female population of Australia did not state their religion.

The greatest numerical increase during the intercensal period was recorded by the Church of England, followed by the Roman Catholic and Catholic undefined, which may be grouped without serious error as the latter term usually signified Roman Catholic. Then followed Presbyterian and Methodist. The greatest proportional increases, however, were recorded by the Christian Scientist, Greek Catholic and Seventh Day Adventist denominations, whilst the greatest proportional decreases were experienced by the Australian Church, Catholic Apostolic, Latter Day Saints and Congregational denominations.

Ninety-nine per cent. of those who stated their religion professed the Christian Faith as compared with 98 per cent. in the year 1921. For every 100 females

who declared they were adherents to some Christian denomination, there were 99 male adherents, as compared with 101 males at the previous Census. Since the previous Census the number who stated they were of non-Christian religion decreased by 20 per cent., and those specifically stating they had no religion decreased by 43 per cent. These comparisons with the 1921 figures, however, need to be interpreted with some care, in view of the fact that so large a proportion of the population gave no reply to this question at the 1933 Census.

POPULATION.—RELIGION—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Religion.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Christian—							
Baptist	49,194	56,509	105,703	49,654	56,220	105,874	171
Brethren	5,493	6,532	12,025	4,501	5,542	10,043	- 1,982
Catholic, Greek	3,938	1,434	5,372	8,435	3,476	11,911	6,539
Catholic, Roman	565,029	568,973	1,134,002	577,997	583,458	1,161,455	27,453
Catholic, undefined	20,082	18,577	38,659	63,861	63,681	127,542	88,883
Church of Christ	24,680	29,894	54,574	28,820	33,934	62,754	8,180
Church of England	1,212,772	1,160,223	2,372,995	1,297,589	1,267,529	2,565,118	192,123
Congregational	34,231	39,834	74,065	30,111	34,791	65,202	- 9,311
Lutheran	31,627	25,892	57,519	32,569	28,234	60,803	3,284
Methodist	306,785	325,844	632,629	331,002	352,420	683,422	51,393
Presbyterian	322,072	314,902	636,974	356,743	356,486	713,229	76,255
Protestant, undefined	37,309	29,803	67,112	37,750	35,014	72,764	5,652
Salvation Army	14,534	17,005	31,539	14,297	16,913	31,210	- 329
Seventh Day Adventist	4,640	6,665	11,305	5,992	7,973	13,965	2,660
Other	16,508	16,162	32,670	19,605	22,241	41,846	9,176
Total Christian	2,649,644	2,617,997	5,267,641	2,859,826	2,867,912	5,727,738	460,097
Non-Christian—							
Buddhist	1,945	120	2,065	640	95	735	- 1,330
Chinese	3,512	79	3,591	298	7	305	- 3,286
Confucian	2,536	156	2,692	772	15	787	- 1,905
Hebrew	11,392	10,223	21,615	12,183	11,370	23,553	1,938
Mohammedan	2,647	221	2,868	1,668	209	1,877	- 991
Other	1,896	678	2,574	865	348	1,213	- 1,361
Total Non-Christian	23,928	11,477	35,405	16,426	12,044	28,470	- 6,935
Indefinite	13,096	6,790	19,886	8,133	4,896	13,029	- 6,857
No Religion	16,022	4,522	20,544	8,969	2,685	11,654	- 8,890
No Reply	60,180	32,078	92,258	473,757	375,191	848,948	756,690
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

9. Birthplace.—At the 1933 Census the native-born element of the population represented 86.3 per cent. as compared with 84.5 per cent. at the 1921 Census, the number of native-born having increased by 25 per cent., while the immigrant population increased by 7 per cent. only.

Although the number born in the British Isles increased by 37,960 or 5.6 per cent., they were equivalent to only 10.7 per cent. of the total population as compared with 12.4 per cent. at the previous Census. Those born in other European countries increased by 23,928, or 33.6 per cent., and represented 1.4 per cent. of the total population of Australia as compared with 1.3 per cent. in the year 1921. The number of Asiatic

birthplace decreased by 5,777, or 19 per cent., during the intercensal period, and was equivalent to only 0.4 per cent. of the total population as compared with 0.6 per cent. at the previous Census.

Of those not born in Australia, 57 per cent. were males and 43 per cent. females. Fifty-five per cent. of those born in the British Isles and 72 per cent. of those born in other European countries were males.

POPULATION.—BIRTHPLACES—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Birthplace.	Census 1921.			Census 1933.			Increase, 1921— 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Australia	2,273,999	2,307,664	4,581,663	2,843,389	2,873,398	5,716,787	1,135,124
New Zealand	20,002	18,609	38,611	23,837	22,126	45,963	7,352
Other Australasian ..	315	209	524	468	306	774	250
Total Australasia ..	2,294,316	2,326,482	4,620,798	2,867,694	2,895,830	5,763,524	1,142,726
England	246,134	199,990	446,124	268,383	217,656	486,039	39,915
Wales	7,845	5,645	13,490	8,492	5,994	14,486	996
Scotland	60,419	48,337	108,756	73,371	58,019	132,290	23,534
Ireland	53,221	51,812	105,033	41,515	37,033	78,548	-26,485
Germany	14,117	8,279	22,396	10,818	6,011	16,829	-5,567
Greece	3,147	507	3,654	6,516	1,777	8,293	4,639
Italy	6,306	1,829	8,135	20,012	6,681	26,693	18,558
Other European ..	27,576	9,265	36,841	31,373	11,766	43,139	6,298
Total Europe ..	418,765	325,664	744,429	460,480	345,837	806,317	61,888
British India	4,976	1,942	6,918	4,538	2,230	6,768	-150
China	14,859	365	15,224	8,049	506	8,555	-6,669
Other Asiatic	6,541	1,609	8,150	6,679	2,513	9,192	1,042
Total Asia ..	26,376	3,916	30,292	19,266	5,249	24,515	-5,777
South African Union ..	2,784	2,624	5,408	3,270	2,908	6,178	770
Other African	806	561	1,367	926	716	1,642	275
Total Africa ..	3,590	3,185	6,775	4,196	3,624	7,820	1,045
Canada	2,378	1,172	3,550	2,621	1,299	3,920	370
United States of America ..	4,134	2,470	6,604	3,560	2,494	6,054	-550
Other American	1,195	723	1,918	965	628	1,593	-325
Total America ..	7,707	4,365	12,072	7,146	4,421	11,567	-505
Polynesia	1,991	1,177	3,168	1,575	1,305	2,880	-288
At Sea	1,872	1,836	3,708	985	1,066	2,051	-1,657
Not Stated	8,253	6,239	14,492	5,769	5,396	11,165	-3,327
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

10. Period of Residence in Australia.—The decline in immigration into Australia during recent years is reflected in the figures in this table. They show that, of residents not born in Australia who stated their period of residence, 6 per cent. had resided in Australia for a period of less than five years, and 25 per cent. for less than ten years, as compared with 11 per cent. and 35 per cent. respectively at the previous Census.

Fluctuations in immigration into Australia over a long period are also partially revealed by this table, which classifies the immigrant population of Australia according to the period of their residence in Australia. Those in the group 80—84 years represent the survivors in Australia of the arrivals during the gold rush of the fifties, while the heavy numbers in the 45-49 group are the survivors of those arriving during the boom period of the eighties. The particularly heavy immigration of the pre-war years, 1911-1913, is reflected in the outstanding number in the 20-24 years group, followed by the slump during the war period in the numbers in the 15-19 years group, and the increasing immigration after the war in the 10-14 and 5-9 years groups. The great reduction in immigration brought about by the recent economic dislocation is the cause of the relatively small numbers in the 0-4 years group. The 10,190 persons shown as having a period of residence of under 1 year are mostly the passengers and crews of overseas vessels which were in Australian waters on the night of the Census.

POPULATION.—IMMIGRANT—Period of Residence in Australia of Persons who were not born in Australia—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Number of Completed Years of Residence.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Years.							
0	28,386	19,827	48,213	7,407	2,783	10,190	-38,023
1	8,375	16,998	25,373	2,133	1,856	3,989	-21,384
2	2,026	2,490	4,516	2,243	2,277	4,520	.4
3	1,715	1,404	3,119	5,683	5,411	11,094	7,975
4	2,779	2,623	5,402	10,761	9,121	19,882	14,480
0-4	43,381	43,342	86,623	28,227	21,448	49,675	-36,948
5-9	111,895	87,723	199,618	104,666	68,663	173,329	-26,289
10-14	58,919	31,883	90,802	66,087	56,687	122,774	31,972
15-19	15,077	7,818	22,895	26,989	26,102	53,091	30,196
20-24	18,875	8,990	27,865	113,066	77,719	190,785	162,920
25-29	16,873	10,721	27,594	23,205	10,940	34,145	6,551
30-34	47,206	32,273	79,479	16,476	8,334	24,810	-54,669
35-39	56,144	38,272	94,416	11,188	6,308	17,496	-76,920
40-44	31,843	20,851	52,694	22,112	17,200	39,312	-13,382
45-49	16,616	11,776	28,392	36,675	28,300	64,975	36,583
50-54	10,954	9,649	20,603	27,147	20,486	47,633	27,030
55-59	13,077	12,912	25,989	11,414	9,434	20,848	-5,141
60-64	10,372	11,671	22,043	5,744	5,429	11,173	-10,870
65-69	11,378	13,594	24,972	3,754	4,424	8,178	-16,794
70-74	2,875	3,669	6,544	2,938	3,675	6,613	69
75-79	716	935	1,651	2,674	4,051	6,725	5,074
80-84	519	693	1,212	1,246	1,927	3,173	1,961
85-89	78	124	202	113	167	280	78
90-94	16	15	31	27	44	71	40
95-99	1	..	1	3	5	8	7
100 and over .. ..	..	..	..	1	1	1	1
Not Stated	13,903	12,050	25,953	19,971	17,986	37,957	12,004
Total not born in Australia ..	480,618	358,961	839,579	523,722	389,330	913,052	73,473
Born in Australia ..	2,282,252	2,313,903	4,596,155	2,577,339	2,576,398	5,153,737	1,120,632
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

11. Nationality.—The number of foreign nationals in Australia has increased since the 1921 Census by 32 per cent.—males by 25 per cent. and females by 71 per cent.—as compared with an increase of 22 per cent. in the number of British nationality. There has been little change, however, in the proportion of foreign nationals relative to the total population, 99.1 per cent. of the population being British subjects, as compared

with 99.2 per cent. at the previous Census. The greatest increases numerically among the foreign nationals were—Italian, 12,755; Greek, 2,835; Yugoslavian, 2,217; and Polish, 1,257; whilst those of Chinese nationality decreased by 6,007; Dutch by 702; and Japanese by 555.

The number of persons in Australia who were born in countries outside the British Empire totalled 113,661, and of this number 60,259, or 53 per cent., were of foreign nationality at the 30th June, 1933, the remainder being British subjects by naturalization, etc.

The percentage of foreign nationals to the numbers born in the corresponding foreign birthplaces is as follows :—Japanese nationals, 92 per cent. of the Japanese born; Chinese, 91 per cent.; Yugoslavian, 72 per cent.; Greek, 68 per cent.; Italian, 66 per cent.; Russian, 42 per cent.; United States of America, 42 per cent.; and German, 22 per cent.

POPULATION.—NATIONALITY (i.e., ALLEGIANCE)—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Nationality.	Census 1921.			Census 1933.			Increase, 1921— 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
British	2,722,152	2,665,053	5,387,205	3,318,228	3,251,290	6,569,518	1,182,313
Foreign—							
Chinese	13,614	185	13,799	7,615	177	7,792	—6,007
Danish	956	260	1,216	1,046	233	1,279	63
Dutch	1,430	187	1,617	786	129	915	—702
Estonian	(a)	(a)	(a)	515	323	838	(a) 838
Finnish	517	37	554	962	100	1,062	508
French	1,221	867	2,088	924	723	1,647	—
German	2,538	1,017	3,555	2,738	934	3,672	117
Greek	2,430	387	2,817	4,639	1,013	5,652	2,835
Italian	3,984	919	4,903	14,068	3,590	17,658	12,755
Japanese	2,489	150	2,639	1,937	147	2,084	—555
Norwegian	960	65	1,025	1,150	88	1,238	213
Polish	351	149	500	1,008	749	1,757	1,257
Russian	1,655	662	2,317	1,283	772	2,055	—262
Spanish	405	140	545	463	133	596	51
Swedish	1,399	80	1,479	1,274	96	1,370	—109
Swiss	413	151	564	680	272	952	388
United States of America	2,520	737	3,257	1,904	653	2,557	—700
Yugoslavian	502	107	609	2,503	323	2,826	2,217
Other	1,683	587	2,270	3,347	962	4,309	2,039
Total Foreign	39,067	6,687	45,754	48,842	11,417	60,259	14,505
Not Stated	1,651	1,124	2,775	41	21	62	—2,713
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Included with "Other" in 1921. NOTE.—Minus sign (—) denotes decrease.

12. Race.—The people of Australia may be classified into two groups with respect to racial characteristics, viz., non-indigenous and indigenous. The former group comprises the European and other races who have migrated to Australia and their descendants born in Australia, while the latter group consists of the full-blood aboriginal natives of Australia whose estimated numbers at the 30th June, 1930, were 53,608 but who are not included in the general population figures of the Commonwealth. The non-indigenous population of Australia is fundamentally British in race and nationality. The Australian people have the essential characteristics of their British ancestors, with perhaps some accentuation of the desire for freedom from restraint. The complete change of climatic and social environment, the greater opportunity for an open-air life and the absence of the restricting conventions of older countries are exerting a noticeable influence upon the physical characteristics and social instincts of the people.

At the 30th June, 1933, 99.2 per cent. of the population of Australia was of European race and 0.8 per cent. of non-European as compared with 99.1 per cent. and 0.9 per cent. respectively at the 1921 Census. The non European group is divided into two sections, viz., full-bloods who represented 46 per cent. of the total non-Europeans at the 1933 Census and 64 per cent. at the previous Census, and half-castes who accounted for 54 per cent. and 36 per cent. respectively.

During the intercensal period the number of full-blood non-Europeans decreased by 8,195 persons, or 26 per cent., and the number of half-castes increased by 9,450 persons, or 53 per cent. Of the latter the greatest proportion was half-caste Australian aboriginals, who increased in number by 9,084 persons, or 79 per cent. The half-caste population, i.e., persons having a mixture of European and non-European blood, was equivalent to 0.41 per cent. of the total population of Australia as compared with 0.32 per cent. in the year 1921.

POPULATION.—RACE—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Race.	Census 1921.			Census 1933.			Increase, 1921— 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Full-blood— European	2,726,515	2,660,628	5,387,143	3,334,775	3,245,218	6,579,993	1,192,850
Non-European—							
Chinese	16,011	1,146	17,157	9,311	1,535	10,846	— 6,311
Cingalese	231	38	269	196	78	274	5
Filipino	319	103	422	214	78	292	— 130
Indian (a)	2,743	138	2,881	2,216	188	2,404	— 477
Japanese	2,546	194	2,740	2,007	234	2,241	— 499
Malay	986	101	1,087	813	156	969	— 118
Papuan	142	21	163	221	18	239	76
Polynesian (other) ..	1,562	551	2,113	883	505	1,388	— 725
Syrian	1,584	1,308	2,892	1,553	1,327	2,880	— 12
Other	1,077	174	1,251	895	352	1,247	— 4
Total Non-European Full-blood	27,201	3,774	30,975	18,309	4,471	22,780	— 8,195
Half-caste—							
Australian Aboriginal ..	5,980	5,556	11,536	10,631	9,989	20,620	9,084
Chinese	1,891	1,778	3,669	1,901	1,602	3,503	— 166
Indian (a)	366	329	695	360	334	694	— 1
Japanese	97	91	188	116	109	225	37
Negro	108	72	180	119	89	208	28
Polynesian	184	165	349	218	216	434	85
Syrian	173	175	348	149	153	302	— 46
Other	355	296	651	533	547	1,080	429
Total Half-caste	9,154	8,462	17,616	14,027	13,039	27,066	9,450
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Native of India.

NOTE.—Minus sign (—) denotes decrease.

13. Foreign Language.—On the occasion of the 1933 Census, persons who could not read and write English but could read and write some foreign language were asked to state that language. This question had never appeared on the Census Schedule before and there is some doubt whether the question was correctly understood, as it appears that some persons who were able to read and write English and a foreign language also may have replied to this question incorrectly.

The recorded figures indicate that at the 1933 Census, 29,738 persons, comprising 23,638 males and 6,100 females, stated they were not able to read and write English, but were able to read and write a foreign language. 30 per cent. of this number were able to read and write Italian; 17 per cent. Chinese; 10 per cent. Greek; 5 per cent.

Yugoslavian; 4 per cent. Japanese; and 4 per cent. German. Included in the total are 1,014 persons who were passengers, or members of the crews, of oversea vessels in Australian waters on Census night.

Forty-three per cent. of the Italian-born population of Australia stated that they were unable to read and write English but were able to read and write Italian. Similarly, 59 per cent. of those born in China, 54 per cent. of the Japanese, 36 per cent. of the Yugoslavian, 37 per cent. of the Greeks, and 20 per cent. of those born in Malta stated that they were unable to read and write English but could read and write a foreign language.

Particulars were not obtained concerning the number, if any, of foreign born persons who could not read and write any language.

POPULATION.—IMMIGRANT—FOREIGN LANGUAGE—AUSTRALIA.
1921 AND 1933.

PERSONS NOT ABLE TO READ AND WRITE ENGLISH, BUT ABLE TO READ AND WRITE A
FOREIGN LANGUAGE.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Foreign Language.	Males.	Females.	Persons.
Albanian	428	1	429
Arabic	178	99	277
Bulgarian	144	21	165
Chinese	5,008	64	5,072
Croatian	128	19	147
Czechoslovakian	76	12	88
Danish	59	27	86
Estonian	35	29	64
Filipino	65	1	66
Finnish	233	49	282
French	105	130	235
German	598	466	1,064
Greek	2,185	906	3,091
Hebrew	134	203	337
Hindu	614	4	618
Italian	8,630	2,901	11,531
Japanese	1,142	76	1,218
Malayan	389	1	390
Maltese	445	119	564
Norwegian	124	5	129
Polish	102	124	226
Russian	278	302	580
Serbian	74	6	80
Spanish	277	93	370
Swedish	143	20	163
Syrian	93	67	160
Yugoslavian	1,158	263	1,421
Other	793	92	885
Total	23,638	6,100	29,738

14. Industry.—The following table shows the population of Australia classified according to the industry group in which they are usually engaged. The number of breadwinners in Australia at the 30th June, 1933, was 3,155,621, of whom 2,367,780 were males and 787,841 females. The term "breadwinner" generally includes persons

of all ages who are employers, working on own account, wage and salary earners, unemployed persons, pensioners, and those of independent means. Pensioners included in this number totalled 263,064. Excluding pensioners, the breadwinners numbered 2,892,557, comprising 2,244,013 males and 648,544 females. Owing to the change to an improved classification since the 1921 Census, in accordance with the recommendations of the Conference of Empire Statisticians, there has been some difficulty in making a strictly accurate comparison between the numbers engaged in each group at the Censuses of 1921 and 1933. The main divergence is that relating to the proportion of breadwinners to total population. This is the result of the exclusion of pensioners from the industry groups under the new classification.

At the 1921 Census pensioners were classified to their previous industry, or to the dependent or independent groups, whichever was stated. On this occasion, however, they were specifically directed to state if they were pensioners and they have been classed accordingly. These facts need to be borne in mind in considering the recorded changes to which attention is called below.

The proportion of breadwinners (including all pensioners shown) in the male population increased from 68.1 per cent. at the 1921 Census to 70.3 per cent. at the 1933 Census, and female breadwinners from 17.5 per cent. to 24.1 per cent. If pensioners are excluded, the proportion of breadwinners at the 1933 Census was as follows:—Males, 66.6 per cent. and females 19.9 per cent. Comparable figures for the year 1921 are not available.

Since the 1921 Census the total of male breadwinners, including pensioners, has increased by 25.8 per cent., and female breadwinners by 68.7 per cent. This increase in the number of female breadwinners is due in large measure to the increase in the stated number of old-age and invalid pensioners in 1933 as compared with the stated number in 1921. Excluding those who were not definitely stated to be associated with some occupation or industry, the number of breadwinners has increased by 17.9 per cent.—males by 15.4 per cent. and females by 27.9 per cent.

At the 1933 Census, as also at the previous Census, the "Industrial" group (factories, construction works, etc.) was the predominant group of industries and included 32.1 per cent. of the breadwinners in Australia (excluding those not definitely associated with industry) in 1933 as compared with 31.4 per cent. at the 1921 Census. The number of persons engaged in industrial occupations throughout Australia exceeded those in all primary industries by 209,120, or 32 per cent., as compared with 22 per cent. at the previous Census. The proportion of breadwinners engaged in the Agricultural, Pastoral and Dairying industries decreased from 21.0 per cent. at the 1921 Census to 20.3 per cent. in the year 1933.

During the intercensal period the aggregate increase in the number of males employed in each industry group was greater than that for females, with the exception of Personal and Domestic Service, and the Public Administration and Professional groups. The proportion of females to the total number of persons engaged in the various occupational groups has increased in the majority of groups, as follows:—Personal and Domestic Service from 76.2 per cent. in the year 1921 to 78.4 per cent. in the year 1933; Public Administration and Professional from 39.0 per cent. to 46.1 per cent.; Commerce and Finance to 24.9 per cent. (21.8); Entertainment, Sport and Recreation to 16.4 per cent. (13.0); Transport and Communication to 5.2 per cent. (3.5); and Agricultural, Pastoral, etc., to 3.6 per cent. (2.1). In the Industrial Group (factories, construction works, etc.), the numbers of persons engaged in the Building and Construction Sections—where the proportion of females is low—have increased more than in the factory group with the result that the proportion of females in the group has fallen from 16.7 per cent. to 15.9 per cent. Considered separately it will be seen that the proportion of females in the several sections has scarcely altered since 1921 so that the smaller proportion of females in the group as a whole is due to the altered values of the component

parts of the group. In all industry groups taken together the proportion of females to the total number of persons engaged has increased from 19.9 to 21.6 per cent.

POPULATION.—NUMBERS ENGAGED IN INDUSTRY—AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS)

Industry Group.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Fishing and Trapping ..	10,671	81	10,752	14,570	41	14,611	3,859
Agricultural, Pastoral and Dairying	471,460	9,895	481,355	528,184	19,633	547,817	66,462
Forestry	30,191	89	30,280	26,019	144	26,163	-4,147
Mining and Quarrying ..	66,524	242	66,766	68,527	193	68,720	1,752
Industrial—							
Manufacturing	326,847	118,727	445,574	375,434	136,077	511,511	65,937
Building	94,878	396	95,274	107,939	407	108,346	12,172
Roads, Earthworks, etc.	137,057	49	137,106	217,335	321	217,656	80,550
Other	39,126	726	39,852	28,584	974	29,558	-10,294
Total Industrial ..	597,908	119,898	717,806	728,392	137,779	866,171	148,365
Transport and Communica- tion	200,523	7,214	207,737	212,161	11,732	223,893	16,156
Commerce and Finance ..	258,595	72,083	330,678	338,837	112,335	451,172	120,494
Public Administration and Professional	131,234	83,995	215,229	125,092	107,120	232,212	16,983
Entertainment, Sport and Recreation	15,517	2,313	17,830	20,278	3,972	24,250	6,420
Personal and Domestic Service	49,934	159,880	209,814	52,354	190,024	242,378	32,564
No Industry or Industry not stated	50,115	11,299	61,414	129,829	65,601	195,430	134,016
Pensioners	(b)	(b)	(b)	123,767	139,297	263,064	(b)
Total Breadwinners	1,882,672	466,080	2,348,752	2,367,780	787,841	3,155,621	806,869
Dependants	880,198	2,205,875	3,086,073	999,331	2,474,887	3,474,218	388,145
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes unemployed persons for whom industry was not stated. (b) Comparable figure not available. NOTE.—Minus sign (—) denotes decrease.

15. Grade of Employment.—This table shows the population of Australia classified according to the capacity in which they are engaged in the various branches of industry. The number of employers at the 30th June, 1933, was 207,680, an increase of 48.7 per cent. over the number stated at the 1921 Census, but actually 2 per cent. less than the number of employers at the earlier 1911 Census. Those persons who were stated to be working on own account showed an increase of 7.9 per cent. since the 1921 Census.

Of the population of Australia at the 30th June, 1933, 2,099,548 persons or 31.7 per cent. were in the wage-earning group. This was slightly more than the percentage of 30.8 recorded at the previous Census. Since the 1921 Census the number of persons in the wage-earning group has increased by 26.3 per cent.—males increasing by 23.7 per cent., and females by 35.7 per cent.

The proportion of females to the total number of persons in the wage-earning group has increased from 22.6 per cent. in the year 1921 to 24.3 per cent. at the time of the 1933 Census.

Of the wage-earning group, 1,447,507 or 69.0 per cent. were in full-time employment at the date of the Census; 170,997 persons, or 8.1 per cent., were employed part-time (this number includes those who stated themselves to be on sustenance work or relief work); and 481,044, or 22.9 per cent., stated themselves to be unemployed.

POPULATION.—GRADE OF EMPLOYMENT—AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Grade.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Employer	129,142	10,481	139,623	186,849	20,831	207,680	68,057
Working on Own Account	206,191	46,030	342,321	318,951	50,424	369,375	27,054
Wage or Salary Earner				1,019,158	401,982	1,421,140	
Apprenticed							
Wage Earner	1,148,132	354,761	1,502,893	20,674	5,693	26,367	115,611
Employed Part Time				144,170	26,827	170,997	
Unemployed	137,675	21,405	159,080	405,269	75,775	481,044	321,964
Helper not receiving Salary or Wages	31,620	3,172	34,792	40,754	5,262	46,016	11,224
Grade not applicable (a)	994,590	2,229,653	3,224,243	1,226,806	2,674,756	3,901,562	677,319
Not Stated	25,420	7,362	32,782	4,480	1,178	5,658	-27,124
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes pensioners, persons of private means not in business, females engaged in home duties, scholars and other dependants. NOTE.—Minus sign (—) denotes decrease.

16. Unemployment.—The number of persons who stated they were wholly unemployed at the 30th June, 1933, totalled 481,044, or 22.9 per cent. of the number of persons in the wage-earning group. Of those unemployed, 405,269 were males and 75,775 females, representing a percentage of unemployment of 25.5 for males and 14.8 for females respectively.

Corresponding percentages of unemployment from the 1921 Census results were males 10.7 per cent. and females 5.7 per cent. At the 1933 Census 15,061 males and 7,710 females who were unemployed and under 21 years of age stated they had never been in employment.

The percentage of males unemployed in Australia according to the Census returns (25.5 per cent.) was practically the same as the percentage of members of reporting Trade Unions in Australia who were unemployed (25.4), as shown by the returns supplied by the Unions to the Commonwealth Statistician for the second and third quarters of 1933.

Of the 481,044 persons unemployed, 453,487 stated the cause of their unemployment : 90.9 per cent. was due to scarcity of employment ; 5.6 per cent. to illness ; 1.1 per cent. to accident ; and 2.4 per cent. to all other causes. The proportion of wage-earners who were unemployed as the result of illness and accident had decreased since the 1921 Census from 2.7 per cent. to 1.4 per cent. for males, and from 2.6 per cent. to 1.7 per cent. for females.

POPULATION.—CAUSE OF UNEMPLOYMENT—AUSTRALIA, 1921 and 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Cause.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons*	Males.	Females.	Persons.	
Scarcity of Employment ..	68,751	6,092	74,843	355,935	50,206	412,231	337,388
Illness	29,799	9,551	39,350	17,223	8,268	25,491	-13,859
Industrial Dispute	4,249	200	4,549	1,520	85	1,611	-2,928
Accident	4,556	246	4,802	4,484	101	4,875	73
Other Causes	24,069	4,061	(a) 28,130	1,500	308	1,808	-26,232
Voluntarily (so described)	(c)	(c)	(c)	4,579	2,802	7,381	(c) 7,381
Not Stated	6,251	1,165	7,416	19,932	7,625	27,557	20,141
Total	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Many classified as "Other Causes" were due to "Scarcity of Employment". (b) Excluding Wage Earners stated to be employed part time or on Sustenance or Relief Work. (c) Not shown separately in 1921. NOTE.—Minus sign (—) denotes decrease.

Of those who stated the duration of their unemployment, 24.9 per cent. had been unemployed for less than 24 weeks; 14.1 per cent. between 24 weeks and 1 year; 13.9 per cent. between 1 and 2 years; 18.2 per cent. between 2 and 3 years; 18.9 per cent. between 3 and 4 years; and 10.0 per cent. for 4 years or longer. Sixty-four per cent. of the males unemployed and 43 per cent. of the females unemployed stated that a period of over one year had elapsed since they were last regularly employed.

POPULATION.—DURATION OF UNEMPLOYMENT—AUSTRALIA, 1921 and 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Duration of Unemployment.	Census 1921.			Census 1933.			Increase. 1921— 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Under 1 week ..	12,107	1,751	13,858	1,970	682	2,652	—11,206
1 week ..	14,250	2,318	16,568	4,612	1,980	6,592	—9,976
2 weeks ..	11,537	1,795	13,332	5,658	2,218	7,876	—5,446
3 ..	9,477	1,424	10,901	5,935	1,917	7,852	—3,949
4 weeks and under 8 weeks	20,967	3,289	24,256	16,637	5,382	22,019	—2,237
8 ..	12,202	1,958	14,160	13,711	3,771	17,482	3,322
12 " " " 12 "	10,662	1,698	12,360	17,815	4,542	22,357	9,997
16 " " " 16 "				10,352	2,441	12,793	
20 " " " 20 "				7,007	1,512	8,519	
24 " " " 24 "				24,607	6,306	30,913	
28 " " " 28 "				6,289	1,171	7,460	
32 " " " 32 "				6,046	1,103	7,149	
36 " " " 36 "				7,240	1,213	8,453	
40 " " " 40 "				3,882	691	4,573	
44 " " " 44 "				113	10	123	
48 " " " 48 "				2,170	358	2,528	
	25,802	3,695	29,497				316,360
Total under 1 year							
1 year and under 2 years				133,184	35,297	168,481	
2 years " " 3 "				50,344	9,700	60,044	
3 " " " 4 "				69,848	8,667	78,515	
4 " " " and over				75,895	5,669	81,564	
Not Stated ..				40,607	2,616	43,223	
	20,671	3,477	24,148	35,391	13,826	49,217	23,069
Total ..	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Excluding Wage Earners stated to be employed part time or on Sustenance or Relief Work.
NOTE.—Minus sign (—) denotes decrease.

17. Income.—The 1933 Census was the first occasion on which any question regarding income was placed on the Census Schedule in Australia. Its successful introduction in the New Zealand Census in the year 1926 inspired the hope that a similar inquiry could be successfully undertaken in Australia. Of the 3,155,211 breadwinners in Australia, 3,052,582 gave the required particulars concerning their income: only 1.7 per cent. of the male and 2.7 per cent. of the female breadwinners failed to furnish this information. The breadwinner group comprised 207,680 employers, 300,375 persons working on own account, 1,447,507 wage and salary earners, 170,007 persons employed only part-time, 481,044 unemployed, 40,010 helpers not receiving wages, and 433,002 persons who did not state their grade of employment or to whom this classification was not applicable. This latter section includes pensioners, independent and retired persons and males over age 16 for whom particulars as to occupation were not stated. In addition to breadwinners, 218,616 persons, comprising dependants and others who stated that the questions concerning occupation were not applicable to their circumstances, were in receipt of some income during the year ended 30th June, 1933. The Census figures have now been analysed separately for employers, those working on own account, wage and salary earners, those in part-time employment, unemployed persons and pensioners.

The following table which shows the information concerning income supplied by persons in the breadwinner group, classified in conjunction with grade of occupation, is substituted for the preliminary particulars published in previous issues of the Official Year Book. At a later stage more detailed information will be available concerning the age and occupation of each section.

POPULATION.—INCOME—AUSTRALIA, CENSUS 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Income.	Em- ployer.	Working on own Account.	Wage or Salary Earner.	Wage Earner employed Part- Time.	Unem- ployed.	Helper not receiving Wages.	Grade not applicable and not stated. a	Total Bread- winners.
MALES.								
No Income (b) ..	5,942	16,894	..	..	175,662	40,754	50,043	289,213
Under £52 per annum ..	12,042	74,424	187,438	39,271	147,109	..	86,130	566,314
£52 to £103 per annum ..	22,498	80,372	168,491	44,746	47,228	..	21,720	385,055
£104 „ £155 „ „ ..	26,475	56,477	134,733	23,937	17,141	..	14,270	273,933
£156 „ £207 „ „ ..	23,878	33,058	184,764	9,572	6,388	..	7,989	265,649
£208 „ £259 „ „ ..	21,362	19,716	170,670	2,473	2,419	..	6,132	222,772
£260 or over „ „ ..	72,252	35,087	183,915	655	1,245	..	14,050	307,804
Not Stated ..	1,800	2,923	10,021	3,516	8,077	..	31,021	57,358
Total ..	186,849	318,951	1,039,832	144,170	405,269	40,754	231,955	2,367,780

FEMALES.

No Income (b) ..	766	3,231	..	..	37,273	5,262	12,739	59,271
Under £52 per annum ..	2,579	18,439	145,483	17,247	27,958	..	96,983	308,689
£52 to £103 per annum ..	4,268	14,149	133,434	7,926	6,500	..	22,279	188,556
£104 „ £155 „ „ ..	3,531	6,638	77,756	998	1,278	..	12,452	102,653
£156 „ £207 „ „ ..	2,367	2,848	30,052	123	236	..	5,024	41,550
£208 „ £259 „ „ ..	1,778	1,529	10,201	32	40	..	3,928	17,508
£260 or over „ „ ..	5,139	2,044	5,613	24	32	..	11,081	23,933
Not Stated ..	403	1,546	5,136	477	2,458	..	35,661	45,681
Total ..	20,831	50,424	407,675	26,827	75,775	5,262	201,047	787,841
Total Breadwinners ..	207,680	369,375	1,447,507	170,997	481,044	46,016	433,002	3,155,621

(a) Includes pensioners, persons of private means not in business, females engaged in home duties, scholars and other dependants. (b) Includes deficit.

§ 10. Dwellings.

1. Number of Dwellings. —The great majority of the questions on the Census Schedule related to the individual members of the household, but other important questions referred to the dwellings in which the people were living at the date of the Census. From the replies to these questions much valuable information has been tabulated concerning housing conditions. This subject is of the greatest importance in its bearing on the welfare of the people, and the results are of great utility for administrative and sociological purposes. For Census purposes a dwelling is the habitation of a family group, whether this comprises the whole of any building or only part thereof. Where two or more separate buildings in one place are used by a single family for dwelling purposes, the whole is regarded as one dwelling. On the other hand, where a building is subdivided into tenements or flats which are occupied as separate units, each unit is counted as a dwelling. A flat has been defined as a room or suite of rooms which was designed, or has been adapted, to be occupied as a separate domicile.

The Census definition of a dwelling includes private houses, tenements, flats, hotels, boarding houses, hospitals, other institutions and any other structure used for the purpose of human habitation. Of the total of 1,618,500 dwellings in Australia at the 30th June, 1933, 1,547,376 were occupied at the date of the Census; 68,772 were unoccupied; and in addition 2,352 were in course of construction.

Since the 1921 Census, the number of dwellings in Australia, including those being built, has been increased by 407,714, or 33.7 per cent., which is a much higher rate of increase than that of 22.0 per cent. for the population during the same period. The number of dwellings in the metropolitan areas increased by 247,891, or 48.7 per cent., to a total of 757,346; those in the provincial sections by 39,439, or 17.3 per cent., to 267,838; and in the rural areas by 120,384, or 25.5 per cent., to 593,316.

At the previous Census there was one private dwelling for every 4.9 persons in Australia but at the 30th June, 1933, this ratio had increased to one dwelling for every 4.4 persons. During the intercensal period there was an increase of one dwelling for every additional three persons. A more informative comparison as to housing conditions can be made, however, on the basis of the average number of dwellings per family unit. Since the 1921 Census the average of 115 dwellings for every 100 families has increased to 119 dwellings at the 1933 Census as the result of an addition during the intercensal period of 131 dwellings for every additional 100 family units. For the purpose of this comparison the number of family units has been limited to those in which both husband and wife were living at the time of the Census.

The following table represents a summary of the information relating to the number of dwellings in each State and Territory which was obtained at the Census of the 30th June, 1933 :—

DWELLINGS.—CENSUS, 30th JUNE, 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Division.	Occupied.	Unoccupied.	Being Built.	Total.	Percentage of Total Dwellings.
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NEW SOUTH WALES.

Urban—					
Metropolitan	288,240	10,941	253	299,434	% 47.59
Provincial	127,190	4,701	192	132,083	20.90
Rural	184,320	13,095	301	197,716	31.42
Total	599,750	28,737	746	629,233	100.00

VICTORIA.

Urban—					
Metropolitan	235,672	6,669	394	242,735	% 53.66
Provincial	47,668	1,543	103	49,314	10.90
Rural	149,532	10,551	253	160,336	35.44
Total	432,872	18,763	750	452,385	100.00

QUEENSLAND.

Urban—					
Metropolitan	69,535	2,270	86	71,891	% 31.85
Provincial	44,080	2,618	77	47,684	21.12
Rural	101,598	4,423	138	106,159	47.03
Total	216,122	9,311	301	225,734	100.00

DWELLINGS.—CENSUS, 30TH JUNE, 1933—*continued.*

Division.	Occupied.	Unoccupied.	Being Built.	Total.	Percentage of Total Dwellings.
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SOUTH AUSTRALIA.

Urban—					%
Metropolitan	77,021	2,242	44	79,307	54.78
Provincial	12,361	478	22	12,861	8.88
Rural	49,892	2,633	94	52,619	36.34
Total	139,274	5,353	160	144,787	100.00

WESTERN AUSTRALIA.

Urban—					%
Metropolitan	47,713	1,506	176	49,395	45.79
Provincial	10,187	270	26	10,483	9.72
Rural	45,678	2,253	58	47,989	44.49
Total	103,578	4,029	260	107,867	100.00

TASMANIA.

Urban—					%
Metropolitan	14,066	495	23	14,584	26.50
Provincial	12,844	441	48	13,333	24.23
Rural	25,574	1,485	58	27,117	49.27
Total	52,484	2,421	129	55,034	100.00

NORTHERN TERRITORY.

Urban—					%
Provincial	437	17	1	455	33.53
Rural	864	38	..	902	66.47
Total	1,301	55	1	1,357	100.00

FEDERAL CAPITAL TERRITORY.

Urban—					%
Provincial	1,583	37	5	1,625	77.27
Rural	412	66	..	478	22.73
Total	1,995	103	5	2,103	100.00

DWELLINGS.—CENSUS, 30TH JUNE, 1933—*continued.*

Division.	Occupied.	Unoccupied.	Being Built.	Total.	Percentage of Total Dwellings.
AUSTRALIA.					
Urban—					%
Metropolitan	732,247	24,123	976	757,346	46.79
Provincial	257,259	19,105	474	267,838	16.55
Rural	557,870	34,544	902	593,316	36.66
Total	1,547,376	68,772	2,352	1,618,500	100.00

2. *Class of Dwelling.*—As previously indicated, the dwellings in which the people are housed comprise private houses, tenements, flats, hotels, boarding houses, charitable institutions, etc. It is desirable when considering the question of housing to exclude those forms of accommodation which do not represent the normal housing conditions associated with family life, and the statistics which follow relate mainly to private dwellings only, i.e., private houses, tenements and flats.

At the 1933 Census 1,509,071, or 97.6 per cent. of the total occupied dwellings in Australia, were private dwellings, as compared with 1,107,070, or 90.0 per cent., at the previous Census. During the intercensal period the number of private dwellings in the Commonwealth increased by 402,001, or 36.4 per cent.; those in the metropolitan areas increased by 244,093, or 52.4 per cent.; the urban provincial by 41,804, or 20.1 per cent.; and in the rural areas by 115,864, or 26.9 per cent.

Of the 1,509,071 occupied private dwellings in Australia at the 30th June, 1933, 1,434,510, or 95.0 per cent. (96.5), were private houses, and 75,152 or 5.0 per cent. (3.5), were tenements or flats. The corresponding percentages for the 1921 Census are shown in parentheses. Since the previous Census the number of private houses in Australia increased by 395,012, or 34 per cent.; and the tenements and flats by 36,749, or 96 per cent.

In the metropolitan areas, private houses increased by 211,040, or 48 per cent., and tenements and flats by 53,047, or 122 per cent., as compared with an increase of 32.0 per cent. in the population and of 39.5 per cent. in the number of married persons in the same area during the same period of 12½ years. At the 1933 Census 5.4 per cent. of the population of the metropolitan areas of the Commonwealth were residing in tenements or flats as compared with 3.9 at the 1921 Census.

Since the 1921 Census there has been a decrease of 24 per cent. in the number of boarding houses in the Commonwealth. This reduction may be partly due to the financial depression and also to the fact that at the 1933 Census the designation of a boarding-house was definitely restricted to dwellings which were described as boarding-houses or dwellings in which there were three or more boarders and where there was no evidence that the head of the household had any other occupation and source of income.

The number of hotels also decreased since the previous Census, showing a decline of 17 per cent. for the Commonwealth. At the 30th June, 1933, there were 6,598 hotels in Australia, equivalent to 1.0 per thousand of population.

As would be anticipated, owing to the large number of persons travelling the roads in search of employment at the time of the Census, the number of groups camping out in the open on Census night was greater than formerly and totalled 9,381 as compared with 5,221 at the previous Census.

Dwellings.—CLASS OF OCCUPIED DWELLING—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Class of Occupied Dwelling.	Number of Occupied Dwellings.								
	Census, 4th April, 1921.				Census, 30th June, 1933.				
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	Increase, 1921-1933.
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
Private House ..	440,092	202,270	426,245	1,068,607	651,138	240,199	543,182	1,434,519	365,912
Tenement or Flat ..	7,221	5,532	5,045	38,403	61,768	9,412	3,972	75,152	36,719
Total Occupied Private Dwellings ..	467,913	207,802	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661
Carotaker's Quarters in Store, Office, etc. ..	864	298	462	1,624	1,326	483	651	2,460	836
Hotel ..	1,925	2,330	3,711	7,966	1,683	1,853	3,062	6,598	1,368
Boarding House, Lodging House, Coffee Palace ..	18,354	4,837	4,474	27,665	14,092	3,666	3,234	20,932	6,733
Educational Institution ..	400	323	207	2,001	477	303	329	1,141	107
Religious Institution (non-educational) ..	97	59	66	222	52	13	30	95	127(a)
Hospital ..	721	766	717	2,204	747	619	773	2,139	65(b)
Charitable Institution (other than Hospital) ..	240	109	260	609	253	66	109	428	181(a)
Penal Establishment ..	63	51	19	133	9	24	16	49	84(a)
Military or Naval Establishment ..	48	63	220	331	19	16	10	45	286(a)
Police Station or Barracks ..	207	386	882	1,475	209	300	1,011	1,520	45
Fire Station ..	157	22	25	205	147	200	42	267	4
Other (includes Club) ..	104	165	2,388	2,747	310	231	1,308	1,849	710
Not Stated ..					45	32	111	198	
Total Other Occupied Dwellings ..	23,271	9,471	13,533	46,275	19,341	7,648	10,716	37,705	8,570
Total Occupied Dwellings ..	491,184	217,278	444,823	1,153,285	732,247	257,259	557,870	1,547,376	394,091
Total Occupied Dwellings per square mile ..	492.26	59.68	0.15	0.39	579.99	82.99	0.19	0.52	0.13
Wagon, Van, etc. (includes campers out) ..	63	570	4,588	5,221	268	1,660	7,444	9,381	4,160

(a) At the 1921 Census, detached buildings in some cases may have been counted separately, whereas in 1933 they have been counted together as one institution.

NOTE.—Minus sign (—) denotes decrease.

3. Materials of Outer Walls. Particulars concerning the materials of which the outer walls were built were supplied for 1,434,519 of the 1,434,519 private houses in Australia, and of these 54.0 per cent. were of wood; 29.2 per cent. brick; 5.3 per cent. stone; 5.0 per cent. iron; 2.6 per cent. were made of canvas or hessian; 1.6 per cent. fibro-cement; 1.1 per cent. concrete; and 1.2 per cent. of other materials.

In the metropolitan areas 53.2 per cent. of the private houses had walls of brick and 39.8 per cent. of wood. In the provincial sections the conditions were reversed, 67.7 per cent. being of wood and 17.5 per cent. of brick, whilst in the rural areas 65.6 per cent. were built of wood and only 5.3 per cent. of brick.

Since the 1921 Census 163,266 brick dwellings were erected in the Commonwealth representing an increase of 1 per cent. Wooden dwellings increased by 122,106 or 28 per cent., a little more than half of these being built in the metropolitan areas; fibro-cement dwellings by 19,433, or at the high rate of 456 per cent., mostly constructed outside the metropolitan areas; iron houses by 28,422, or 65 per cent., 1,065 of these being erected in the metropolitan areas and 27,357 outside; concrete houses by 9,664 or 132 per cent., about one-half being erected in New South Wales and one-fourth in Victoria.

Dwellings in tents increased in number by 9,005, or 31 per cent. As would be anticipated, owing to the provision of relief works for a large number of unemployed, 98 per cent. of these canvas structures were located outside the metropolitan areas.

Of the 74,122 tenements and flats in Australia for which particulars as to walls were stated, 70.1 per cent. were built of brick; 20.4 per cent. wood; 5.6 per cent. stone; and 3.9 per cent. of other materials.

DWELLINGS.—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO MATERIALS OF WHICH OUTER WALLS WERE BUILT—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Number of Occupied Private Dwellings.									
Materials of which Outer Walls were built.	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921-1933.
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
Stone	34,394	10,247	35,342	79,983	30,149	11,588	38,461	80,208	220
Brick	245,232	38,593	20,828	304,653	393,528	45,320	29,071	467,919	163,266
Concrete	3,518	1,186	2,824	7,528	5,005	2,012	8,705	17,525	9,964
Iron	3,853	9,950	30,281	43,790	4,018	13,527	53,797	72,312	28,422
Wood	173,445	143,701	297,629	614,775	266,528	193,960	353,753	787,271	172,496
Sun-dried Bricks	984	291	4,408	5,682	151	312	5,013	5,464	177
Pisé	20	249	2,236	2,505	14	240	2,206	2,550	45
Lath and Plaster	2,672	432	1,189	4,293	2,916	514	1,607	5,037	744
Wattle and Dab	40	73	1,376	1,486	23	32	1,221	1,277	213
Fibro Cement	1,178	794	2,291	4,263	5,847	3,773	14,076	23,696	19,433
Bark	9	31	2,164	2,204	..	39	2,185	2,224	20
Bushes, Rushes .. .. .	..	4	485	489	..	..	308	308	84
Canvas, Calico, Hessian	387	1,586	26,877	28,850	873	3,554	33,428	37,855	9,005
Rubberoid and other compositions	51	70	567	688	11	14	115	140	548
Other Materials	141	78	554	773	49	31	91	171	602
Not Stated	1,959	813	2,239	5,011	1,991	726	2,964	5,681	670
Total Private Dwellings	467,913	207,807	431,200	1,107,010	712,005	240,011	547,184	1,500,671	402,661

NOTE.—Minus sign (—) denotes decrease.

4. Number of Rooms.—For Census purposes, the kitchen and any enclosed sleep-out or portion of a verandah that was permanently enclosed were included in the number of rooms in the dwelling, but the bathroom, pantry and store were not included unless generally used for sleeping. The average number of rooms per private house in Australia at the 30th June, 1933, was 5.03, and was slightly higher than that of 4.99 rooms at the previous Census. The average per private house in the metropolitan areas increased from 5.24 to 5.36 rooms; in the provincial sections the average scarcely altered, being 5.09 as compared with 5.13; and in the rural areas the average of 4.00 rooms per house was slightly lower than at the 1921 Census when the average was 4.07.

The average number of rooms for all tenements and flats was considerably less than that for private houses, and showed a substantial decline from 3.77 to 3.08 rooms, indicating a tendency towards even smaller flats. The reduction in the size of tenements and flats occurred throughout all divisions; the average for the metropolitan areas fell from 3.74 to 3.22 rooms and for the provincial sections from 3.87 to 2.52 rooms, with the heaviest decline of all in the rural areas from 3.85 to 2.24 rooms.

Of the 1,421,810 private houses for which particulars concerning rooms were stated at the 1933 Census, 4.0 (3.9) per cent. consisted of one room only; 3.0 (3.4) per cent. of two rooms; 5.3 (6.9) per cent. of three rooms; 21.6 (24.1) per cent. of four rooms; 29.8 (29.1) per cent. of five rooms; 21.4 (18.1) per cent. of six rooms; 8.6 (7.6) per cent. of seven rooms; 3.4 (3.6) per cent. of eight rooms; and 2.9 (3.3) per cent. of more than eight rooms. The corresponding figures for the 1921 Census are shown in parentheses.

At the 1933 Census 81 per cent. of the private houses in Australia comprised four, five, six, or seven rooms as compared with 79 per cent. at the previous Census. During the intercensal period, nine-tenths of the new houses erected in the Commonwealth consisted of four, five, six, or seven rooms. The greatest percentage increase was shown for private houses of six rooms, 59 per cent.; followed by those of seven rooms, 51 per cent.; five rooms, 37 per cent.; and eight rooms, 30 per cent.

Two-thirds of the tenements and flats in the Commonwealth consisted of two, three, or four rooms, and six-sevenths of the increase in the number of these dwellings during the intercensal period consisted of from two to four rooms; the greatest proportional increases were for those of two, three, and four rooms in that order. Flats of six rooms show a comparatively small increase in number, whilst those with more than six rooms have actually decreased in number by 39 per cent. Here again, as in the case of the larger private houses, there is evidence of subdivision into flats of smaller size.

DWELLINGS.—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Number of Occupied Private Dwellings.

Census, 4th April, 1921.						Census, 30th June, 1933.					
Number of Rooms per Dwelling.(a)	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	Increase, 1921-1933.		
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.					
1	5,845	4,036	35,956	45,837	7,676	7,556	49,063	64,295	18,458		
2	8,897	5,489	26,772	41,158	16,005	8,142	33,440	57,587	16,429		
3	34,784	11,289	34,378	80,451	39,684	11,623	40,271	91,578	11,127		
4	112,254	49,565	102,397	264,216	148,457	52,270	122,579	323,306	59,090		
5	143,637	69,411	101,774	314,822	220,327	81,257	130,650	432,234	117,412		
6	89,968	39,172	65,293	194,433	165,017	52,850	89,408	307,275	112,842		
7	37,049	15,187	29,985	82,221	63,560	19,816	39,830	123,206	40,985		
8	17,311	6,607	14,600	38,518	24,776	7,416	17,356	49,548	11,030		
9	7,190	2,789	6,052	16,031	10,153	2,876	6,982	20,011	3,980		
10	3,932	1,530	3,517	8,979	4,706	1,463	3,859	10,028	1,049		
11	1,675	592	1,298	3,565	1,968	546	1,520	4,034	469		
12	1,208	391	1,248	2,847	1,463	382	1,419	3,264	417		
13	483	172	429	1,084	560	124	452	1,136	52		
14	469	136	532	1,137	499	140	588	1,227	90		
15	230	64	261	555	244	64	346	654	99		
16	151	37	223	411	144	45	236	425	14		
17	95	35	112	242	89	19	168	276	34		
18	62	16	91	169	51	24	122	197	28		
19	39	4	56	99	29	7	49	85	14		
20 and over	199	54	308	561	131	32	352	515	46		
Not Stated	2,435	1,231	6,008	9,674	7,367	2,959	8,464	18,790	9,116		
Total Private Dwellings	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661		
Average Number of Rooms per Private Dwelling(a)	5.15	5.07	4.66	4.94	5.18	5.00	4.58	4.93	0.01		

(a) Includes kitchen and enclosed sleep-out or portion of a verandah that has been permanently enclosed, but does not include bathroom, pantry, store or outhouse, unless generally used for sleeping.

NOTE.—Minus sign (—) denotes decrease.

5. Number of Inmates.—The percentage increase in the number of dwellings in Australia since the 1921 Census has been much greater than the rate of increase of the population, consequently the average number of inmates per dwelling has decreased. The average per private house in the Commonwealth decreased from 4.44 inmates at the previous Census to 4.15 at the 30th June, 1933, and this reduction has been fairly general throughout the metropolitan, provincial and urban divisions.

The average number of rooms per private house was slightly higher than at the previous Census and, as the increment to the population during the intercensal period was less than that of dwellings, the average number of inmates per room for all private houses in Australia decreased from 0.89 to 0.82 persons per room. The largest reduction has occurred in the metropolitan areas where the average per room was 0.77 at the 1933 Census, as compared with 0.86 at the 1921

Census. The average in the provincial areas decreased from 0.87 to 0.81 persons per room, and, in accordance with previous experience, the average number of 0.89 persons per room in the rural areas, although showing a decrease from the previous Census, was greater than that in the other divisions.

There has been a reduction also in the average number of inmates per room in tenements and flats from 0.91 to 0.82 which is exactly the same number of inmates per room as the average for all private houses in the Commonwealth. This decrease is mainly in the metropolitan areas where the average number per room was 0.79 as compared with 0.88 at the previous Census. In the provincial areas there was a slight increase from 0.97 to 0.99 and in the rural areas a greater one from 1.03 to 1.09 persons per room.

An interesting comparison is that relating to the average number of male and female breadwinners in each occupied dwelling at the 30th June, 1933, and at the previous 1921 Census. The average number of breadwinners in each occupied dwelling in Australia at the 30th June, 1933, was as follows:—Males, 1.53; females, 0.51; total breadwinners, 2.04; as compared with 1.63; 0.40; and 2.03 respectively per dwelling at the previous Census. This shows very little change in the average number of breadwinners per dwelling in the Commonwealth. During the intercensal period the average number of male breadwinners per occupied dwelling decreased by 0 per cent., but female breadwinners per dwelling increased by 28 per cent.

DWELLINGS.—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF INMATES—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines. (Revised figures.)

Number of Occupied Private Dwellings.									
Number of Inmates per Dwelling. (a)	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921-1933.
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
1	20,255	16,065	61,300	97,620	34,765	19,818	74,202	128,785	31,165
2	66,972	28,509	58,027	153,508	125,582	40,071	82,234	247,887	94,379
3	88,241	35,097	60,908	185,146	154,083	48,064	87,804	290,911	105,765
4	91,552	36,832	62,706	191,090	150,039	47,306	88,743	286,088	94,098
5	75,486	31,052	56,331	163,460	107,104	36,803	74,276	218,273	54,804
6	52,530	23,493	45,054	121,047	65,452	24,548	54,090	144,000	23,043
7	32,962	15,392	32,073	81,327	36,619	15,043	36,201	87,863	6,536
8	19,059	9,348	22,028	51,035	20,437	9,333	24,345	54,115	3,080
9	10,455	5,348	14,046	29,849	9,059	4,207	11,410	24,682	5,167
10	5,535	2,830	8,160	16,534	4,558	2,258	6,631	13,447	3,087
11	2,672	1,325	4,503	8,500	2,233	1,146	3,388	6,767	1,733
12	1,215	570	2,336	4,130	1,070	552	1,829	3,451	679
13	532	277	1,058	1,867	474	249	931	1,654	164
14	243	104	592	939	228	122	425	775	51
15	108	41	305	454	115	52	236	401	2
16	41	27	164	232	48	26	156	230	—
17	23	11	77	111	21	6	63	90	—
18	16	2	52	70	18	3	45	66	—
19	8	3	29	40	5	1	38	44	—
20 and over ..	8	2	32	42	6	3	41	50	—
Total Private Dwellings	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661
Total Inmates (a) ..	2,067,961	914,350	1,893,117	4,875,428	2,876,805	1,030,694	2,257,210	6,164,709	1,289,281
Average Number of Inmates per Private Dwelling (a) ..	4.42	4.40	4.39	4.40	4.04	4.13	4.13	4.08	0.32

(a) Includes all persons sleeping out on verandahs or in sleep-outs.
decrease.

NOTE.—Minus sign (—) denotes decrease.

6. **Persons Sleeping Out.**—The 1933 Census was the first occasion on which this question was included on the Census Schedule. It was felt that a reliable basis of comparison of the housing statistics of the various States was not possible hitherto, owing to the wide divergence in the numbers of persons who sleep out on verandahs, etc., in the northern and southern sections of Australia.

The Census results for the Commonwealth show that 4.5 per cent. of the occupants of private houses and 3.8 per cent. of the occupants of flats regularly sleep out on unenclosed verandahs, etc. In the provincial areas 5.3 per cent. of the population occupy such sleep-outs, 5.0 per cent. in the rural areas, and 3.7 per cent. in the metropolitan areas. These figures do not include those occupying permanently enclosed sleep-outs who are regarded for Census purposes as inmates of rooms. The average number of occupants of flats who sleep out is less than that for private houses, and is probably due to the smaller average number of inmates per flat.

As would be anticipated, owing to climatic conditions, the largest percentage of occupants who sleep out on unenclosed verandahs was recorded in Queensland, 7.6 per cent.; followed by Western Australia, 7.0 per cent.; New South Wales, 4.9 per cent.; Victoria, 2.7 per cent.; South Australia, 2.5 per cent.; and Tasmania, 1.8 per cent.

DWELLINGS.—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO THE NUMBER OF PERSONS SLEEPING OUT ON VERANDAHS, ETC.—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Number of Occupied Private Dwellings.									
Number of Persons Sleeping out. (a)	Private Houses.				Tenements and Flats.	Total Private Dwellings.			
	Urban.		Rural.	Total Aus- tralia.		Urban.		Rural.	Total Aus- tralia.
	Metro- politan.	Pro- vincial.				Metro- politan.	Pro- vincial.		
0	589,029	212,259	484,619	1,285,907	69,504	646,039	221,014	488,358	1,355,411
1	37,747	13,587	17,523	70,129	3,912	40,153	13,573	27,956	70,111
2	17,006	8,085	17,349	42,440	1,324	18,082	8,269	17,413	43,764
3	5,230	3,439	7,091	15,760	284	5,430	3,500	7,114	16,044
4	2,045	1,704	3,678	7,427	89	2,101	1,726	3,689	7,516
5	660	680	1,452	2,792	26	673	692	1,453	2,818
6	233	297	672	1,202	2	234	298	672	1,204
7	77	105	258	440	..	77	105	258	440
8	41	50	127	218	1	42	50	127	219
9	8	8	38	54	..	8	8	38	54
10	14	4	16	34	..	14	4	16	34
11	2	..	3	5	..	2	..	3	5
12 .. ..	..	..	4	4	..	..	..	4	4
13 .. ..	..	..	1	1	..	..	..	1	1
14 .. ..	..	..	1	1	..	..	..	1	1
15 .. ..	..	..	1	1	..	..	..	1	1
17 .. ..	..	..	1	1	..	..	..	1	1
Indefinite	45	10	49	104	10	51	13	50	111
Total Private Dwellings	651,138	240,199	543,182	1,434,519	75,152	712,906	249,611	547,154	1,509,671
Total Persons Sleeping out (a)	100,429	53,290	113,248	266,967	7,918	106,889	54,369	113,627	274,885
Average Number per Occupied Private Dwelling (a)	0.15	0.22	0.21	0.19	0.11	0.15	0.22	0.21	0.18

(a) Includes only persons sleeping out on verandahs or in sleep-outs which were not permanently enclosed.

7. **Nature of Occupancy.**—At the 1921 Census the nature of occupancy of private houses was not tabulated separately from tenements and flats. At the 1933 Census, however, it was ascertained that 42.8 per cent. of the private houses in Australia for which particulars were supplied were occupied by owners; 13.5 per cent. by purchasers by instalments; 39.1 per cent. by tenants; and 4.6 per cent. by others.

In the metropolitan areas 51.4 per cent. of the occupants of private houses were owners or purchasers by instalments, as compared with 54.4 per cent. in the provincial areas, and 63.2 per cent. in the rural areas. In the latter areas, however, the ownership of the house is associated with the ownership of the land acquired as a means of livelihood.

More than 91 per cent. of the tenements and flats in the Commonwealth were occupied by tenants. The figures for all private dwellings, including tenements and flats, show that at the 1933 Census 53.8 per cent. of the dwellings were occupied by owners or were in process of purchase by instalments, and 41.7 per cent. were occupied by tenants, as compared with 53.7 per cent. and 41.7 per cent., respectively, at the 1921 Census, showing practically no alteration during the intercensal period.

DWELLINGS.—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO THE NATURE OF OCCUPANCY—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Revised figures.)

Number of Occupied Private Dwellings.									
Nature of Occupancy.	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921- 1933.
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
Owner ..	133,729	81,008	227,026	441,763	218,539	100,421	285,453	604,413	162,650
Purchaser by Instalments ..	79,055	25,607	33,321	137,983	117,305	28,720	43,602	189,627	51,644
Tenant ..	241,567	91,031	117,082	449,680	360,393	108,350	146,600	615,412	165,732
Caretaker ..					6,410	5,022	29,331	40,763	
Other Methods of Oc- cupancy ..	6,036	6,025	37,514	49,575	3,146	2,810	19,166	25,122	16,310
Not Stated ..	7,526	4,136	16,347	28,009	7,113	4,279	22,942	34,334	6,325
Total ..	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661

8. *Rent per Week.*—The information which has been tabulated concerning rents is restricted to the actual rent paid per week for unfurnished private dwellings occupied by tenants. The particulars required concerning rent were supplied for 89 per cent. of the 549,275 private houses and for 91 per cent. of the 66,137 tenements and flats in Australia. For 15.5 per cent. of the private houses the rent was less than 10s. per week; for 49.8 per cent., between 10s. and £1 per week; for 27.4 per cent., between £1 and £1 10s. per week; and for 7.3 per cent., over £1 10s. per week. Three-fourths of the houses with rents of less than 10s. per week were located outside the metropolitan areas.

The average rent was 17s. per week for unfurnished private houses throughout the Commonwealth; 19s. 7d. per week in the metropolitan areas, 15s. 9d. in the provincial sections, and 11s. 2d. in the rural areas.

The average rent for unfurnished tenements and flats in the metropolitan areas was 23s. 6d. per week, or approximately 20 per cent. more than that paid for private houses in the same areas, notwithstanding that private houses in the metropolitan areas contain 50 per cent. more rooms than flats. In the provincial and rural areas, however, the rent of tenements and flats was approximately 15 per cent. and 11 per cent. respectively less than for private houses. For 16.9 per cent. of the tenements and flats a rent of less than 10s. per week was paid, and this percentage was slightly greater than for private houses; the 33.8 per cent. between 10s. and £1 per week was only two-thirds the proportion of private houses in this group; the percentage of 26.5 between £1 and £1 10s. per week was practically similar for private houses and flats; but the 22.8 per cent. of tenements and flats with rent exceeding £1 10s. per week was three times the percentage of private houses in this rental group.

A comparison of the average rents at the 1933 Census with those at the previous Census is possible for all private dwellings only and not for private houses separately from tenements and flats, which were not tabulated separately at the 1921 Census. The average rent of 17s. 6d. per week for all private dwellings comprising private houses, tenements and flats in the Commonwealth was 6 per cent. higher than that at the 1921 Census. The average of 20s. 2d. for the metropolitan areas at the 30th June, 1933, was 2.4 per cent. lower than for the previous Census, the average of 15s. 7d. in the provincial areas, however, was 11 per cent. higher, and the average of 11s. 2d. in the rural areas was also 13 per cent. higher than at the previous Census.

During the intercensal period particulars are collected regularly by the Commonwealth Statistician from house agents in certain cities and towns throughout the Commonwealth showing the rents as at the middle of each quarter. A comparison of these figures for the first quarter of the year 1921 with the second quarter of 1933 shows approximately the same change in average rents as was obtained from the Census figures. They also show that the peak period of high rents during the intercensal period occurred in the first quarter of the year 1928 when the average for the metropolitan areas of Australia was 21 per cent. higher than for the year 1921, but since that peak year the average has fallen by 20 per cent. to the 1933 figure.

In the metropolitan areas 15 per cent. of the total private dwellings were tenements and flats, and the percentages of the total numbers of private dwellings in the several rental groups which consisted of tenements and flats were as follows:—Under 10s. per week, 29 per cent.; between 10s. and £1, 10 per cent.; between £1 and £1 10s., 13 per cent.; between £1 10s. and £2, 26 per cent.; between £2 and £2 10s., 36 per cent.; and in the over £2 10s. per week rental group 47 per cent. were tenements and flats.

DWELLINGS.—PRIVATE DWELLINGS OCCUPIED BY TENANTS CLASSIFIED ACCORDING TO THE RENT PER WEEK—AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.) (Preliminary figures—subject to revision.)

Number of Occupied Private Dwellings.

	Census, 4th April, 1921.				Census, 30th June, 1933.				
Rent per week Unfurnished.	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	Increase, 1921- 1933.
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
Under 5s. ..	1,067	3,317	18,304	22,688	1,663	2,837	14,869	19,369	— 3,319
5s. and under 10s. ..	12,786	19,885	37,957	70,628	20,333	13,865	32,083	66,281	— 4,347
10s. " " 15s. ..	56,331	31,158	29,830	117,319	71,755	30,618	33,435	135,808	18,489
15s. " " 20s. ..	56,381	16,535	10,189	83,305	86,365	25,186	16,036	127,587	44,282
20s. " " 25s. ..	49,486	9,104	5,683	55,273	74,460	16,806	9,173	100,439	45,166
25s. " " 30s. ..	25,373	3,709	1,546	30,628	39,777	6,310	2,860	48,947	18,319
30s. " " 35s. ..	14,305	1,884	1,061	17,250	21,403	2,827	1,051	25,281	8,031
35s. " " 40s. ..	5,900	441	207	6,548	8,274	712	180	9,166	2,618
40s. " " 45s. ..	5,589	570	469	7,628	7,992	505	170	8,667	1,030
45s. " " 50s. ..	2,726	179	126	3,031	2,642	95	55	2,792	— 239
50s. " " 70s. ..	1,556	123	85	1,764	1,488	57	21	1,566	— 198
70s. " " 80s. ..	579	24	26	629	593	10	5	608	— 21
80s. " " 90s. ..	503	35	34	572	445	5	2	452	— 120
90s. " " 100s. ..	210	11	5	224	180	6	..	195	— 29
100s. and over ..	580	14	29	623	482	7	4	493	— 130
Not Stated ..	15,995	4,042	11,533	31,570	22,532	8,513	36,716	67,761	36,191
 Total Private Dwell- ings ..	 241,567	 91,031	 117,082	 449,680	 360,393	 108,359	 146,660	 615,412	 165,732
 Average Weekly Rent per Private Dwelling	 20s. 8d.	 14s. 6d.	 9s. 11d.	 16s. 6d.	 20s. 2d.	 15s. 7d.	 11s. 2d.	 17s. 6d.	 18. 0d.

NOTE.—Minus sign (—) denotes decrease.

9. *Private Dwellings of three to six rooms.*—A special inquiry has been made concerning private houses of three to six rooms with walls of wood, or of brick or stone, as a more satisfactory average of predominant rents paid by wage earners can be obtained by restricting the analysis to this group, which as previously indicated comprises 78.1 per cent. of the private houses in Australia.

Since the 1921 Census the number of houses of three to six rooms in Australia has increased by 34 per cent. to a total of 1,108,594. Particulars as to rent are summarized for 440,560 houses of this number with walls of wood, brick or stone which were occupied by tenants; 46 per cent. had walls of brick or stone, and 54 per cent. of wood. The distribution is the same as that of the previous Census and there was no proportional increase in the number of brick houses of three to six rooms in the rented group during the intercensal period.

At the 1933 Census there was a smaller proportion of rented houses of three and four rooms and an increased proportion of those of five and six rooms, for both wooden houses and brick houses. The relative increases for rented houses of three, four, five and six rooms during the intercensal period were 2, 28, 43 and 60 per cent. respectively. The proportional increase of houses of five and six rooms was even higher in the metropolitan areas. The average rent of 18s. 5d. per week for all private houses, three to six rooms, of wood, brick or stone in the metropolitan areas at the 1933 Census was practically the same as at the previous Census.

In the provincial sections the average rent of 15s. 7d. per week was much higher than at the previous Census and the increase is found for all houses of three, four, five or six rooms whether of wood, brick or stone. In the rural areas also the average rent of 11s. 6d. was much higher than that at the 1921 Census, and an increase is found in all types of houses included in this group.

An interesting comparison with respect to the rent of private houses is that based on the average weekly rent per room. At the 1933 Census the average rent per room for wooden houses in the metropolitan areas of Australia was 3s. 5d. per week, and showed little alteration from the average of 3s. 6d. per week at the 1921 Census. Similarly, the average of 4s. 1d. per room for brick houses in the metropolitan areas was practically the same as at the previous Census.

In the urban provincial sections, however, the average rent of 3s. 1d. per room for wooden houses was higher than the 1921 Census figure of 2s. 8d. per week, and the rent of 3s. 6d. per week for brick houses was also higher in comparison with the previous figure of 3s. 1d. per week. The average rent per room in the rural areas also showed increases from 2s. 1d. to 2s. 6d. per week for wooden houses, and from 2s. 3d. to 2s. 7d. per week for those of brick. With the exception of brick houses in the metropolitan areas, the average rent per room for houses of three rooms was generally higher than for houses of four, five or six rooms. The increase since the 1921 Census in the rent per room was somewhat similar for all houses of three to six rooms in the provincial and rural sections of the Commonwealth.

**DWELLINGS.—AVERAGE WEEKLY RENT PER ROOM OF PRIVATE HOUSES, THREE TO SIX ROOMS, WITH WALLS OF WOOD, BRICK OR STONE, OCCUPIED BY TENANTS—
AUSTRALIA, 1921 AND 1933.**

(Exclusive of Tenements, Flats, Boarding-houses, Hotels, etc., and of Dwellings occupied solely by full-blood Aborigines.) (Preliminary figures—subject to revision.)

Average Weekly Rent per Room.

Particulars.	Census, 4th April, 1921.				Census, 30th June, 1933.				Increase, 1921- 1933.
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Private Houses with Walls of—									
Wood—									
3 rooms	3 9	3 3	2 6	3 2	3 8	3 6	2 8	3 3	0 1
4 "	3 7	2 9	2 2	2 10	3 7	3 4	2 7	3 2	0 4
5 "	3 5	2 7	2 1	2 9	3 5	3 1	2 6	3 1	0 4
6 "	3 5	2 6	2 0	2 7	3 4	2 11	2 3	2 11	0 4
3 to 6 rooms ..	3 6	2 8	2 1	2 9	3 5	3 1	2 6	3 1	0 4
Brick or Stone—									
3 rooms	4 0	3 5	2 4	3 10	4 0	3 9	2 6	3 11	0 1
4 "	4 2	3 3	2 2	3 11	4 2	3 7	2 7	4 0	0 1
5 "	4 2	3 1	2 3	3 10	4 1	3 6	2 8	3 11	0 1
6 "	4 1	3 0	2 3	3 10	4 1	3 5	2 7	3 11	0 1
3 to 6 rooms ..	4 2	3 1	2 3	3 10	4 1	3 6	2 7	3 11	0 1
Wood, Brick or Stone—									
3 rooms	3 11	3 4	2 5	3 6	3 11	3 7	2 8	3 7	0 1
4 "	3 11	2 11	2 2	3 3	3 11	3 4	2 7	3 6	0 3
5 "	3 11	2 9	2 1	3 3	3 10	3 3	2 6	3 6	0 3
6 "	3 11	2 8	2 0	3 3	3 10	3 1	2 4	3 5	0 2
3 to 6 rooms ..	3 11	2 9	2 2	3 3	3 10	3 3	2 6	3 6	0 3

§ 11. Oversea Migration.

1. Oversea Migration during Present Century.—Earlier issues of the Official Year Book contained in summary form tables showing the increase of population by net migration from 1801 to the latest date, while the Demography Bulletins issued by this Bureau give this information in respect of the individual years. On page 325 of this chapter a summary will be found of the increase by net migration to the population of the States—from 1901 to 1935 in quinquennial groups and from 1927 to 1936 in single years. The following table shows for Australia as a whole the arrivals and departures as well as the net migration since 1901. Departures and net migration have been adjusted in accordance with the figures of the 1933 Census:—

OVERSEA MIGRATION.—AUSTRALIA.

Period.	Arrivals.			Departures.			Net Migration.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
1901-05..	196,993	84,167	281,160	204,170	93,783	297,953	- 7,177	- 9,616	-16,793
1906-10..	251,482	119,552	371,034	213,483	100,273	313,756	37,999	19,279	57,278
1911-15..	422,927	209,893	632,820	382,552	113,406	495,958	40,375	96,487	136,862
1916-20..	438,721	100,764	539,485	390,202	78,374	468,776	48,519	22,190	70,709
1921-25..	289,695	188,357	478,052	172,236	122,550	294,786	117,459	65,807	183,266
1926-30..	266,593	203,887	470,480	193,336	147,437	340,773	73,257	56,450	129,707
1931-35..	124,207	115,116	239,323	131,883	115,326	250,209	-10,676	- 210	-10,886
1927 ..	69,540	47,883	117,423	37,506	28,337	65,843	32,034	19,546	51,580
1928 ..	55,921	43,871	99,792	39,369	30,369	69,738	16,552	13,502	30,054
1929 ..	44,508	37,740	82,248	39,735	30,993	70,428	4,773	7,047	11,820
1930 ..	33,881	29,212	63,093	40,989	30,634	71,623	- 7,108	- 1,422	- 8,530
1931 ..	21,986	18,428	40,414	30,356	20,152	50,508	- 8,370	- 1,724	-10,094
1932 ..	22,637	19,360	41,997	24,864	20,130	44,994	- 2,227	- 770	- 2,997
1933 ..	24,457	23,335	47,792	25,053	22,525	47,578	- 596	810	214
1934 ..	27,451	26,253	53,704	26,428	24,996	51,424	1,023	1,257	2,280
1935 ..	27,676	27,740	55,416	28,182	27,523	55,705	- 506	217	- 289
1936 ..	29,726	30,168	59,894	29,045	29,352	58,397	681	816	1,497

NOTE.— Minus sign (—) indicates an excess of departures over arrivals.

The net migration has varied greatly during the above periods, reaching a maximum in the five years 1921-25. The Great War, during which 331,781 members of the Australian Imperial Forces embarked for service overseas, was responsible for a very large increase in the departures during the years 1914 to 1918. Immigration increased rapidly from 1910 to 1912, the gain during the latter year being the greatest in any one year in the present century (with the exception of 1919 when the troops were returning to Australia).

Although the quinquennium 1926-30 as a whole resulted in the considerable gain of 123,707 persons, the figures for the individual years reveal the decline in immigration which set in after 1927 and which resulted in an actual loss of population in 1930, 1931, 1932 and 1935.

The influence of the Commonwealth immigration policy is clearly reflected in the above figures. The average annual number of nominated and selected immigrants arriving in Australia during the periods specified was as follows:—

IMMIGRATION.—NUMBER OF NOMINATED AND SELECTED PERSONS.

Period.	Average Annual Number.	Year.	Recorded Number.
1901-05	Not available	1930	2,683
1906-10	7,945	1931	275
1911-15	30,111	1932	175
1916-20	2,326	1933	25
1921-25	23,090	1934	159
1926-30	19,881	1935	100
1931-35	734	1936	9

The number of nominated and selected immigrants reached its peak in 1926, when 31,260 arrivals were recorded; at present, assistance is confined to nominees who desire to join their families in Australia.

2. **Country of Embarkation and Destination.**—The countries from which the migrants arrived or to which they departed are shown for the year 1930 in Demography Bulletin No. 54. Annual averages for the period 1925-29 will be found in Official Year Book No. 25.

3. **Nationality or Race.**—The preponderance of migrants to and from Australia is of British nationality, while only a small proportion is of non-European race.

The number of arrivals and departures of migrants since 1926 classified according to nationality or race is shown in the next table. The recorded departures have been adjusted in accordance with the figures of the 1933 Census:—

NATIONALITY OR RACE OF ARRIVALS AND DEPARTURES.—AUSTRALIA.

Nationality or Race.	Arrivals.			Departures.		
	1926-30.	1931-35.	1936.	1926-30.	1931-35.	1936.
British	386,000	200,150	40,491	281,440	210,540	50,058
French	3,394	3,090	655	3,292	3,003	604
German	3,172	1,446	406	1,061	1,204	354
Greek	3,842	1,435	703	2,040	1,629	208
Italian	19,170	7,234	1,455	8,617	5,711	542
Yugoslavian ..	4,426	1,203	415	2,280	1,242	182
United States ..	8,916	5,065	2,073	8,101	5,119	1,963
Other European ..	15,355	4,432	1,481	7,001	4,863	966
Total European ..	444,944	224,064	56,769	314,741	233,410	55,477
Chinese	15,640	8,700	1,605	17,513	9,972	1,752
Japanese	1,702	1,025	501	2,004	2,050	448
Indian and Cingalese	2,790	2,007	459	2,095	1,775	380
Other Non-European	5,335	2,918	500	4,420	3,002	340
Total Non-European	25,536	15,259	3,125	26,032	16,799	2,920
Total	470,480	239,323	59,894	340,773	250,209	58,397

During the period 1926-30 there was a considerable influx of Italian, Greek and Yugoslavian settlers, so that although there was also much concurrent emigration of these nationals they provided a large permanent addition to the population of Australia. In the following quinquennium 1931-1935, however, there was a considerably reduced increment to the Italian population by migration, whilst there was actually an excess of departures of most other nationals. In the year 1935 the increase in the number of Southern Europeans was greater than in 1934 but in 1936 the net addition of these peoples to the population was slightly less than in 1935. During recent years there has generally been an excess of departures of non-European people as a whole though it is not true of all non-European nationals. The movements of Chinese show a consistent excess of departures, but with regard to other nationals the movements have been variable. The net gain or loss according to nationality or race for the same periods and the percentage of each nationality on the total gain or loss for the year are given in the following table:—

NET GAIN OR LOSS.—NATIONALITY OR RACE—AUSTRALIA.

Nationality or Race.	Net Gain or Loss.			Proportion.		
	1926-30.	1931-35.	1936.	1926-30.	1931-35.	1936.
				Per cent.	Per cent.	Per cent.
British	105,220	-10,390	-1,167	81.12	-95.44	-77.96
French	102	87	51	0.08	0.80	3.41
German	1,211	152	142	0.93	1.42	9.49
Greek	1,802	-194	495	1.39	-1.78	33.07
Italian	10,553	1,523	913	8.14	13.99	60.99
Yugoslavian ..	2,146	-39	233	1.65	-0.36	15.56
United States ..	815	-54	110	0.63	-0.50	7.35
Other European ..	8,354	-431	515	6.44	-3.96	34.40
Total European ..	130,203	-9,346	1,292	100.38	-85.85	86.31
Chinese	-1,864	1,263	87	-1.44	11.61	5.81
Japanese	-242	-425	53	-0.19	-3.90	3.54
Indian and Cingalese	695	232	79	0.54	2.13	5.27
Other Non-European	915	-84	160	0.71	-0.77	10.69
Total Non-European	-496	1,540	205	-0.38	14.15	13.69
Total	129,707	-10,886	1,497	100.00	-100.00	100.00

Owing to the depressed conditions in Australia the gain by migration decreased rapidly during the years 1928 and 1929. In the subsequent period 1930 to 1932 there was an actual loss of population by migration. A slight gain was recorded in 1933 and in 1934 but the year 1935 again showed a small loss. The position improved again in the year 1936 when a net gain of 1,497 persons was recorded. During the period 1932 to 1936 the alternate small gains and losses were approximately equal and consequently it may be stated that during the last five years migration has not affected the total numbers of the population. Migrants of Italian nationality showed the greatest net gain in numbers in the year 1930, followed by Greeks and Yugoslavians in that order. Over 81 per cent. of the net migration in 1926-30 consisted of persons of British nationality and the remaining 19 per cent. were other Europeans. In the following quinquennium, 1931-35, there was a loss by migration of persons of British nationality and an increase of those of Italian nationality. Non-Europeans, with the exception of Indians and Cingalese, also showed an excess of departures.

4. Classes of Arrivals and Departures.—Since 1st July, 1924, the arrivals and departures have been classified according to the declared intention of the migrant in regard to intended residence. The figures for the quinquennial periods 1926-30 and

1931-35 and the years 1934, 1935 and 1936, which have been adjusted in accordance with the figures of the 1933 Census, are as follows:—

MIGRANTS CLASSIFIED ACCORDING TO INTENDED RESIDENCE.—AUSTRALIA.

Classification.	1926-30.	1931-35.	1934.	1935.	1936.
Permanent new arrivals ..	224,010	54,444	11,778	12,608	12,653
Australian residents returning from abroad ..	121,395	84,554	18,875	20,307	21,749
Temporary visitors ..	125,029	100,325	23,051	22,501	25,492
Not Stated ..	46	..	..	..	..
Total Arrivals ..	470,480	239,323	53,704	55,416	59,894
Australian residents departing permanently ..	103,209	71,670	12,166	11,357	11,370
Departing temporarily ..	111,714	79,426	18,257	20,323	22,050
Temporary visitors ..	125,772	99,108	21,001	24,025	24,977
Not Stated ..	78	5	..	..	..
Total Departures ..	340,773	250,209	51,424	55,705	58,397

Permanent new arrivals have decreased very considerably since the year 1927, and the number for 1936, although showing a slight increase over the previous year, was less than one half of the annual average for the decennium 1926-35. Permanent departures were far more numerous in the years 1928 to 1931 than in the earlier years of the period but decreased during the past three years, the number in 1935 being the lowest recorded. Up to and including 1929 there was a considerable gain of permanent residents, but during 1930 and 1931 there was a heavy loss. The loss was very much reduced in 1932, 1933 and 1934, whilst during the past two years there was actually a small gain in permanent residents.

The figures in the table above are based on the information supplied by travellers at the time of arrival or departure. For various reasons the intentions of travellers are subject to subsequent modification, and the figures quoted in the table must therefore be accepted as a record of intention only.

§ 12. Immigration.

(A) Assisted Migration into Australia.

1. Joint Commonwealth and States' Scheme.—In 1920 an arrangement was arrived at between the Commonwealth and State Governments whereby the Commonwealth became responsible for the recruiting and medical inspection of migrants, and for their transport to Australia. The State Governments advised the Commonwealth from time to time as to the numbers and classes of migrants they were prepared to receive, and became responsible for their subsequent settlement. In addition, personal and group nominations were accepted by the States, the nominators undertaking responsibility for their settlement and after care.

In 1930 on account of the financial and industrial depression it was decided to confine the grant of assisted passages to the wives and dependent children of men who arrived in the Commonwealth prior to the 1st January, 1930.

In December, 1936, the Commonwealth Government decided to lift the restrictions imposed in 1930 and to grant assisted passages from the United Kingdom to the extent desired by the States.

2. **Assisted Passage Rates.**—The British and Commonwealth Governments jointly contribute towards the fares of approved migrants, the rates in operation being tabulated as under :—

IMMIGRATION.—ASSISTED PASSAGE RATES.

Migrant.	Fare Charged to Migrant. (a)	Amount of Assistance jointly contributed by British and Commonwealth Governments.
	£ s. d.	£ s. d.
Married persons and widows or widowers accompanied by at least one child under 19 years (children at rate according to age) each	11 0 0	22 0 0
Married persons and widows or widowers without at least one child under 19 years each	16 10 0	16 10 0
Other adults, 19 years and over each	16 10 0	16 10 0
Juveniles, 17 and under 19 years	11 0 0	22 0 0
Juveniles, 12 and under 17 years	5 10 0	27 10 0
Children under 12 years	Free	16 10 0

(a) The amounts quoted are in sterling.

Further information may be obtained from the Official Secretary, High Commissioner's Office, Australia House, Strand, London W.C.2, or from the Secretary, Department of the Interior, Canberra, Federal Capital Territory.

3. **Numbers of Persons Assisted.**—The number of assisted migrants for the years 1929–1936 inclusive, and the total from the earliest years up to the end of 1936, are given in the following table :—

IMMIGRATION—NUMBER OF PERSONS ASSISTED.

Persons Assisted during the year —	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Federal Capital Territory	Total.
1929	5,431	2,604	1,292	526	2,976	101	13	12,943
1930	1,174	468	484	61	471	20	5	2,683
1931	76	45	43	6	99	5	1	275
1932	21	3	23	..	123	5	..	175
1933	11	3	1	1	56	..	..	72
1934	11	4	1	..	143	..	..	159
1935	1	..	1	..	98	..	..	100
1936	4	2	1	..	2	..	..	9
Total from earliest years to end of 1936	345,834	255,314	235,996	115,818	86,506	24,957	67	1,064,492

(B) The Regulation of Immigration into Australia.

1. **Powers and Legislation of the Commonwealth.**—(i) *Constitutional.* Under Part V., Sec. 51, xxvii. and xxviii. of the Commonwealth Constitution Act, the Parliament of the Commonwealth is empowered to make laws with respect to immigration and emigration and the influx of criminals.

(ii) *Legislation.* A summary of the provisions of the Immigration Act 1901-1925 and the Contract Immigrants Act 1905 (excepting the provisions of the Amending Immigration Acts of 1920, 1924 and 1925, which will be found in Official Year Book, No. 21, p. 927), containing particulars regarding the admission of immigrants, prohibited immigrants, the liabilities of shipmasters and others, and kindred matters will be found in preceding Year Books (*see* Official Year Book, No. 12, pp. 1166 to 1168).

The Immigration Act 1930.—Under this Act it is provided that Section 5, subsection (1) of the Immigration Act 1901-1925 applies to any person who, since the commencement of the Immigration Restriction Act 1901, evaded an officer when entering Australia, or gained admission or re-admission by fraudulent means. Steps can be taken to deal with such persons as prohibited immigrants at any time after they have landed in Australia.

The Immigration Act 1932.—This Act provides (a) that any alien who fails to satisfy an officer that he holds a landing permit, or that his admission has been authorized, may be prohibited from landing; (b) for the increase of the period during which a person may be declared a prohibited immigrant from three to five years; (c) that a person not a British subject and who has been convicted of a crime of violence against the person may be deported pursuant to an order of the Minister without his being subjected to a dictation test; (d) for the deportation of a person who has been convicted of a criminal offence or who has become an inmate of an insane asylum or public charitable institution within five years from the date of arrival instead of three years as hitherto; and (e) that where the wife of a person whom it is proposed to deport so desires, her name and the names of her dependent children may be included in her husband's deportation order. This would of course apply only to wives and children who were themselves immigrants.

The Immigration Act 1933.—This Act provides that Section 5A, as amended by the Immigration Act 1932—*see* (d) above—shall apply to persons who arrived in Australia since the commencement of the Section, i.e., since 2nd December, 1920. It also makes statutory provision for the taking of securities for compliance with the provisions of the Act.

The Immigration Act 1935.—The main purpose of this Act was to add a penalty clause to Section 5 of the principal Act, to overcome a legal difficulty which had arisen in regard to relying on Section 7 for the imposition of penalties on persons convicted under Section 5 on charges of being prohibited immigrants offending against the Act.

2. Conditions of Immigration into Australia.—(i) *Immigration of Non-European or Coloured Persons.* In pursuance of the "White Australia" policy, the general practice is not to permit Asiatics or other coloured immigrants to enter Australia for the purpose of settling permanently.

There are special arrangements with India, Japan and China under which facilities are afforded for subjects of those countries who are bona fide merchants, students, or tourists to enter and remain in Australia under exemption whilst they retain their status.

(ii) *Immigration of White Aliens.* Aliens seeking to enter Australia for permanent residence are required to obtain landing permits or special authority for admission from the Department of the Interior. The classes in respect of whom landing permits will, in ordinary circumstances, be favourably considered are as follows:—

(a) Dependent relatives of persons already settled in Australia, subject to satisfactory guarantees for maintenance. (*Note.*—The term "dependent relatives" includes wives, children under 21 years of age, adult single daughters and sisters, parents and fiancées.)

(b) Aliens outside the category of dependent relatives who (i) are nominated by persons in Australia guaranteeing to the satisfaction of the Minister that the nominees will not be allowed to become a charge upon the State; (ii) will engage in trades and occupations in which there is opportunity for their absorption without detriment to Australian workers; and (iii) are in possession of £50 (Australian) landing money.

- (c) Aliens without guarantors in Australia who will engage in trades and occupations in which there is opportunity for their absorption without detriment to Australian workers, provided also that they are in possession of £200 (Australian) landing money.

Aliens seeking to enter Australia are also required to hold valid national passports visaed by a British Consul for travel to Australia except in cases where visa requirements have been abolished by reciprocal arrangements to which the Commonwealth Government is a party. The exemptions so far apply to nationals of the following countries, viz.:—Austria, Belgium, Czechoslovakia, Denmark, France, Germany, Italy, Liechtenstein, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

(iii) *General Information.* General information as to conditions of entry into Australia may be obtained from the following offices:—

- (a) In Australia: The Secretary, Department of the Interior, Canberra, F.C.T., Australia; (b) In Great Britain: The Official Secretary, Australia House, Strand, London, England; (c) In the United States of America: The Official Secretary, Commissioner for Australia in the United States of America, "Comard Building," 25 Broadway, New York City, U.S.A.

3. *Persons Admitted Without Dictation Test.*—The following table shows the number and nationality of persons admitted during the year 1936 without passing the dictation test. Persons who are permitted to land pending transshipment to another country are not included:—

PERSONS ADMITTED WITHOUT DICTATION TEST.—NATIONALITIES,
AUSTRALIA, 1936.

Nationality or Race.	1936.	Nationality or Race.	1936.
Albanian	73	United States of America	2,073
Austrian	54	Other Whites	70
Belgian	68	American Negro	6
British	49,491	ASIATICS—	
Bulgarian	64	Afghan	1
Czechoslovakian	51	Chinese	818
Danish	77	Filipino	6
Dutch	252	Japanese	448
Estonian	33	Javanese	17
Finnish	23	Koepangers	94
French	655	Malay	84
German	496	Natives of India and Ceylon	175
Greek	703	Palestinian	58
Hungarian	15	Syrian	43
Italian	1,455	OTHER RACES—	
Maltese (British)	122	Maoris	4
Norwegian and Swedish	111	Pacific Islanders	45
Polish	166	Papuan	191
Russian	133	Unspecified	14
Spanish	41		
Swiss	128		
Yugoslavian	415	Total	58,773

4. *Departures of Persons of Non-European Races.* The following figures in common with the other statistics in this sub-section have been compiled by the Department of the Interior and are exclusive of transshipments. They are not therefore in agreement with departures, compiled in this Bureau and published elsewhere, which include transshipments. The number of persons of non-European races who left Australia during

the year 1936 was 2,005, distributed among the various nationalities as follows :—American Negroes, 12; Arabs, 2; Chinese, 932; Filipinos, 8; Natives of India and Ceylon, 174; Japanese, 415; Javanese, 21; Malays, 90; Mauritians, 26; Pacific Islanders, 36; Papuans, 255; West Indians, 1; and others, 33.

(C) Passports.

Provision is made in the Immigration Act 1901–1935 for the production of passports by all persons over 16 years of age who desire to enter Australia. Similarly, the Passports Act 1920 provides that no person over the age of 16 years shall leave Australia unless—

- (a) he is the holder of a passport or other document authorizing his departure; and
- (b) his passport has been visaed or indorsed in the prescribed manner for that journey, and the visa or indorsement has not been cancelled.

Among the exceptions to this requirement are natural-born British subjects leaving for New Zealand, Papua, or Norfolk Island; members of the crew of any vessel who sign on in Australia for an oversea voyage and who satisfy an authorized officer that they are by occupation seafaring men; aboriginal natives of Asia, or of any island in the East Indies, or in the Indian or Pacific Oceans. The charge for a Commonwealth passport is £1, for an ordinary visa 18s., and for a transit visa 2s.

With regard to the abovementioned condition (b), the Commonwealth Government has agreed to the inclusion of Australia in reciprocal arrangements for the abolition of visa requirements made by the British Government with the respective Governments of the following countries :—Austria, Belgium, Czechoslovakia, Denmark, France, Germany, Italy, Liechtenstein, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland.

§ 13. Naturalization.

1. *Commonwealth Legislation.*—Naturalization in Australia is governed by the Nationality Act 1920–1936. The qualifications necessary for naturalization are :—(a) Residence in Australia continuously for not less than one year immediately preceding application for naturalization, and previous residence, either in Australia or in some other part of His Majesty's dominions, for a period of four years within the last eight years before the application; (b) good character and an adequate knowledge of the English language; and (c) intention to settle in the British Empire.

The amending Act of 1930 provided for the charge of a prescribed fee for a Certificate of Naturalization. The fee is £5, except in the case of a certificate granted to a woman who was a British subject prior to her marriage to an alien, in which case the amount is 5s. An applicant who served with a good record in the Commonwealth Naval or Military Forces during the Great War 1914–1918 is exempt from payment of any fee.

The amending Act of 1930 provided for certain alterations in the law dealing with the national status of married women, and vested in the Minister for the Interior certain powers and functions hitherto exercised by the Governor-General.

The amending Act, which came into operation on 1st April, 1937, provided for the following exceptions of the general principle that the wife of a British subject shall be deemed to be a British subject, and the wife of an alien deemed to be an alien :—

- (a) a woman who was a British subject prior to her marriage to an alien does not cease to be a British subject unless by reason of her marriage she acquires her husband's nationality;
- (b) if a man, during the continuance of his marriage, ceased to be a British subject his wife does not lose her British nationality unless she acquires her husband's new nationality;
- (c) if a man, during the continuance of his marriage, ceases to be a British subject and his wife acquires his new nationality she may within one year from the date of which she acquired her husband's new nationality, or within such further time as the Minister in special circumstances allows, make a declaration that she desires to retain her British nationality;

(d) after 31st March, 1937, the wife of an alien does not acquire British nationality upon his becoming naturalized unless within one year from the date of his naturalization, or within such further time as the Minister in special circumstances allows, she makes a declaration that she desires to acquire British nationality :

(e) where an alien is a subject of a State at war with His Majesty, his wife, if she was a natural born British subject, may upon making a declaration that she desires to resume British nationality be granted a certificate of naturalization

Provision was also made in the amending Act whereby a woman who was a British subject prior to her marriage and who acquired her husband's nationality may make a declaration that she desires to retain while in Australia or in a Territory to which the Act applies the rights, powers and privileges of a British subject.

A summary of the main provisions of the Principal Act will be found in Official Year Book No. 22, pp. 934-935.

2. **Certificates Granted.**—(i) *Australia.* Particulars regarding the previous nationalities of the recipients of certificates of naturalization issued under the Act during the year 1936, and the countries from which such recipients had come, are given in the following table :—

NATURALIZATION.—CERTIFICATES GRANTED, 1936.

Previous Nationalities of Recipients.				• Countries from which Recipients of Commonwealth Certificates had come.			
Nationality.	Certificates Granted.	Nationality.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.
Albanian ..	19	Lithuanian ..	3	Albania ..	13	Latvia ..	5
American, U.S. ..	20	Norwegian ..	11	Armenia ..	1	Lithuania ..	2
Armenian ..	1	Palestinian ..	11	Austria ..	4	Norway ..	2
Austrian ..	6	Polish ..	69	Belgium ..	10	Palestine ..	10
Belgian ..	9	Rumanian ..	5	Bulgaria ..	15	Poland ..	52
Bulgarian ..	13	Russian ..	75	China ..	30	Rumania ..	2
Chinese ..	4	Spanish ..	11	Czechoslovakia ..	5	Russia ..	10
Czechoslovakian ..	11	Swedish ..	23	Denmark ..	12	South America ..	9
Danish ..	21	Swiss ..	12	Egypt ..	30	Spain ..	9
Dutch ..	2	Syrian ..	14	Estonia ..	17	Sweden ..	12
Estonian ..	20	Turkish ..	6	Finland ..	13	Switzerland ..	11
Finnish ..	25	Yugoslavian ..	62	France ..	26	Syria ..	12
French ..	17	Other ..	9	Germany ..	100	United States ..	27
German ..	136			Great Britain ..	40	of America ..	50
Greek ..	170			Greece ..	149	Yugoslavia ..	50
Hungarian ..	8	Total ..	1,413	Holland ..	5	Other ..	84
Italian ..	610			Hungary ..	4		
Latvian ..	10			Italy ..	603	Total ..	1,413

(ii) *States.* The certificates of naturalization granted in 1936 were issued in the various States as follows :—New South Wales, 431; Victoria, 267; Queensland, 407; South Australia, 102; Western Australia, 185; Tasmania, 12; Northern Territory, 6; and 3 in the Federal Capital Territory; Total, 1,413.

§ 14. Population of Territories.

At the Census of the 30th June, 1933, special arrangements were made to obtain complete and uniform information concerning each of the six Territories of Australia including the Mandated Territories of New Guinea and Nauru, viz.: (1) Northern Territory; (2) Federal Capital Territory; (3) Norfolk Island; (4) Papua; (5) Mandated Territory of New Guinea; and (6) Mandated Territory of Nauru.

A summary of the revised figures as to the population and number of dwellings in each Territory at the Census of 1933 is given in the following table :—

POPULATION AND DWELLINGS.—TERRITORIES, 30th JUNE, 1933.
(EXCLUSIVE OF INDIGENOUS POPULATION.)

Territory.	Population.			Dwellings.			
	Males.	Females.	Persons.	Occu- pied.	Unocu- pied.	Being Built.	Total.
Northern Territory ..	3,378	1,472	4,850	1,301	55	1	1,357
Federal Capital Territory ..	4,805	4,142	8,947	1,995	103	5	2,103
Norfolk Island ..	662	569	1,231	383	34	6	423
Papua ..	1,232	941	2,173	683	35	1	719
Territory of New Guinea (Mandate) ..	3,709	1,507	5,216	1,776	26	7	1,809
Nauru (Mandate) ..	1,037	64	1,101	81	13	..	94

Particulars concerning the indigenous populations of the Territories of the Commonwealth are included in Chapter XII. of this issue.

§ 15. The Aboriginal Population of Australia.

In Official Year Book No. 17, pp. 951 to 961, a brief account was given of the Australian aboriginal population, its origin, its numbers as estimated from time to time, and the steps taken for its protection. On pages 914 to 916 of Official Year Book No. 22 particulars are shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pages 687-696 of Official Year Book No. 23.

The aborigines are scattered over the whole of the mainland, but the majority are concentrated in Western Australia, Queensland and the Northern Territory. At a Census of aborigines taken on the 30th June, 1936, the following particulars were disclosed :—

ABORIGINAL CENSUS.—30th JUNE, 1936.

State or Territory.	Full-blood.					Half-caste.					Total Full- blood and Half- caste.
	Noma- dic.	In Em- ploy- ment.	In Super- vised Camps. (a)	Other.	Total.	Noma- dic.	In Em- ploy- ment.	In Super- vised Camps. (a)	Other.	Total.	
New South Wales	97	302	284	188	869	817	2,612	2,513	3,778	9,777	10,646
Victoria ..	..	22	26	7	55	6	169	57	354	586	641
Queensland ..	2,101	3,624	5,790	822	12,337	54	1,902	1,910	1,919	5,785	18,122
South Australia	1,076	261	58	148	1,543	570	357	629	258	1,814	3,357
Western Australia	15,560	3,082	1,145	1,360	22,047	1,100	1,180	824	1,162	4,266	26,313
Tasmania ..	..	..	..	1	1	..	78	173	19	270	271
Northern Territory	9,881	3,050	3,431	434	16,846	25	383	355	121	884	17,730
Federal Capital Territory ..	..	..	..	..	..	..	32	47	..	79	79
Australia ..	28,685	11,301	10,785	2,927	53,698	2,602	6,713	6,538	7,608	23,461	77,159

(a) This figure does not include those living in supervised camps who were in regular employment.

§ 16. The Chinese in Australia.

In Official Year Book No. 18, pp. 951 to 956, a brief historical sketch was given regarding "The Chinese in Australia."

§ 17. The Pacific Islanders in Australia.

In Official Year Book No. 19, pp. 902-3, a brief account was given of the introduction of Kanakas into Australia.

CHAPTER XIV.

VITAL STATISTICS.

§ 1. Births.

1. Births, 1936.—The number of male and female births and the total births registered in Australia during the year ended the 31st December, 1936, are shown in the table hereunder. The numerical relation which these births bear to the population, and various other associated features, are given in later tables.

BIRTHS, 1936.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
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MALE BIRTHS.

Single births	23,165	14,499	9,448	4,441	4,196	2,317	64	82	58,212
Twins ..	498	294	183	68	87	38	1	..	1,169
Triplets ..	6	3	..	..	4	..	..	..	13
Total ..	23,669	14,796	9,631	4,509	4,287	2,355	65	82	59,394

FEMALE BIRTHS.

Single births	22,025	13,788	8,949	4,312	4,101	2,177	48	70	55,470
Twins ..	492	290	175	90	90	49	..	..	1,180
Triplets ..	7	9	..	..	1	..	..	..	17
Total ..	22,524	14,087	9,124	4,402	4,192	2,226	48	76	56,679

TOTAL BIRTHS.

Single births	45,190	28,287	18,397	8,753	8,297	4,494	112	158	113,688
Twins ..	(a) 990	(b) 584	(c) 358	158	(d) 177	(e) 87	(f) 1	..	(g) 2,355
Triplets ..	(h) 13	12	..	..	(i) 5	..	..	..	(j) 30
Total ..	46,193	28,883	18,755	8,911	8,479	4,581	113	158	116,073

TOTAL CONFINEMENTS.

Married Mothers ..	43,651	27,325	17,678	8,562	8,059	4,321	87	156	109,839
Unmarried Mothers ..	2,064	1,264	900	270	334	218	26	2	5,078
Total Mothers	45,715	28,589	18,578	8,832	8,393	4,539	113	158	114,917

(a) 50 stillborn twins not included. (b) 12 stillborn twins not included. (c) 4 stillborn twins not included. (d) 11 stillborn twins not included. (e) 3 stillborn twins not included. (f) 1 stillborn twin not included. (g) 81 stillborn twins not included. (h) 2 stillborn triplets not included. (i) 1 stillborn triplet not included. (j) 3 stillborn triplets not included.

A summary of the total number of births in each State and Territory at intervals since 1901 is given in the following table:—

BIRTHS—SUMMARY, 1901 to 1936.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
1901 ..	37,875	31,008	14,303	9,070	5,718	4,230	32	79	102,945
1911 ..	47,537	33,020	19,084	11,057	5,604	5,437	31	80	122,193
1921 ..	54,030	35,591	20,329	11,974	7,807	5,755	79	27	136,108
1931 ..	47,721	30,332	17,833	9,079	8,549	4,762	72	161	118,500
1932 ..	44,895	27,194	17,307	8,521	7,905	4,494	79	157	110,933
1933 ..	44,195	28,392	17,150	8,900	7,874	4,553	74	131	111,269
1934 ..	43,335	27,828	17,360	8,459	7,801	4,470	88	134	109,475
1935 ..	44,676	27,884	17,688	8,270	8,119	4,456	84	148	111,325
1936 ..	46,193	28,883	18,755	8,911	8,479	4,581	113	158	116,073

(a) Part of New South Wales.

2. Birth Rates.—The next table gives the crude birth rates at intervals from 1901 to 1936:—

CRUDE BIRTH RATES.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
1901 ..	27.78	25.77	28.52	25.41	30.39	28.58	6.72	(b)	27.16
1911 ..	28.58	25.01	27.63	28.86	28.22	28.60	9.36	16.84	27.20
1921 ..	25.91	23.16	26.68	24.09	23.37	26.97	20.18	10.86	24.95
1924 ..	23.93	22.01	24.21	22.01	22.86	24.89	15.34	10.48	23.21
1925 ..	23.79	21.49	24.24	21.22	21.95	24.21	16.98	9.77	22.86
1926 ..	22.63	20.84	23.06	20.73	21.79	23.33	18.50	12.07	21.98
1927 ..	22.40	20.30	22.78	20.33	21.63	22.68	15.28	10.31	21.62
1928 ..	22.27	19.69	22.36	19.98	21.36	21.77	18.61	14.64	21.27
1929 ..	21.04	18.98	20.60	18.63	21.51	22.03	11.86	17.91	20.25
1930 ..	20.59	18.55	20.80	17.42	21.44	21.66	14.26	18.30	19.86
1931 ..	18.67	16.86	19.28	15.77	19.77	21.18	14.52	18.29	18.16
1932 ..	17.40	15.19	18.56	14.74	18.31	19.78	16.07	16.92	16.86
1933 ..	16.99	15.60	18.14	15.32	17.95	19.93	15.23	14.47	16.78
1934 ..	16.52	15.20	18.17	14.50	17.66	19.51	17.84	14.47	16.39
1935 ..	16.89	15.16	18.31	14.14	18.23	19.41	16.47	15.77	16.55
1936 ..	17.31	15.93	19.17	15.17	18.84	19.84	21.50	16.18	17.13

(a) Number of births per 1,000 of the mean population for the year. (b) Part of New South Wales.

NOTE.—The birth rates in the above table are based on births registered in the respective States and Territories. About 20 per cent. of births in respect of which the mother's usual residence is the Federal Capital Territory take place in Queensland just over the New South Wales border, while the number of births in respect of which the mother's usual residence is New South Wales which take place in the Federal Capital Territory is practically negligible. Consequently the following rates based on births in respect of which the mother's usual residence is the Federal Capital Territory are a fairer measure of birth rates in the Federal Capital Territory:—

1922 ..	20.46	1925 ..	20.87	1928 ..	23.38	1931 ..	21.40	1934 ..	17.93
1923 ..	11.79	1926 ..	22.47	1929 ..	23.28	1932 ..	20.00	1935 ..	20.25
1924 ..	17.26	1927 ..	21.10	1930 ..	22.07	1933 ..	19.11	1936 ..	18.95

The variations similarly caused in the birth rates for the States and Northern Territory by referring the birth registrations to the State or Territory in which the mother was usually resident are not so great as in the Federal Capital Territory, as shown by the following corrected rates for 1930:—New South Wales, 17.13; Victoria, 15.17; Queensland, 19.13; South Australia, 15.17; Western Australia, 18.80; Tasmania, 19.88; and Northern Territory, 23.60.

The preceding table shows a marked reduction in the birth rate since 1901. In the earlier years of the century the rate fluctuated somewhat and 28.60 was recorded in 1912, but from that year onwards, with the exception of 1920 and the latest two years under review, namely, 1935 and 1936, the decline has been continuous. The prevailing economic conditions have, of course, seriously affected the birth rate during recent years.

The principal factor in determining the crude birth rate is the proportion of *married* women of child-bearing age in the community, but as the fecundity of women varies with age, the birth rate per 1,000 married women will vary according to the age composition of the group, and, other things being equal, the rate generally should be highest where the average age of married women is lowest. For the purposes of the following table the child-bearing age has been taken as from 15-44 years inclusive, and all births of which the mothers were stated to be over 45 years have been counted in the group 40-44. The calculations have been made for the last two Census periods and cover in each case the Census year together with the year immediately preceding and the year immediately following.

BIRTH RATES, AND FACTORS AFFECTING THEM.

Particulars.	1932-34. (Age Distribution at Census of 1933.)							1920- 1922.
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.	Aus- tralia.
Crude birth rate per 1,000 persons	16.97	15.33	18.29	14.85	17.97	19.74	16.68	25.15
Birth rate per 100 women 15-44 inclusive	7.25	6.46	7.93	6.31	8.05	8.71	7.14	10.74
Birth rate per 100 married women 15-44 incl. (a)	12.98	12.34	14.46	12.01	14.67	16.08	13.14	19.65
Ex-nuptial births—per cent. on all births	5.03	4.35	4.99	3.18	4.15	5.37	4.66	4.69
Ex-nuptial births per 100 unmarried women 15-44 incl. ..	0.78	0.56	0.83	0.41	0.70	0.96	0.69	1.05
Women 15-44 incl.—per cent. all persons	23.41	23.73	23.05	23.54	22.34	22.66	23.35	23.41
Average age of all women 15-44 incl.	29.06	29.42	28.88	29.12	28.62	28.54	29.10	28.54
Married women 15-44 incl.—per cent. on all persons	12.41	11.88	12.02	11.97	11.74	11.61	12.10	12.20
Average age of married women 15-44 incl.	33.38	34.00	33.41	33.98	33.21	32.98	33.58	32.48

(a) Nuptial births only.

The following figures give a comparison for Australia, based on data obtained at Census periods, of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15 to 44 years inclusive:—

Particulars.	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Births per 1,000 women aged 15-44	169.7	158.8	117.3	117.2	107.4	71.4
Nuptial births per 1,000 married women 15-44	321.0	332.0	235.8	230.0	199.5	131.4

3. *Birth Rates of Various Countries.*—(i) *Crude Rates.* A comparison with other countries for the year 1935, the latest year for which complete figures are available, shows that the Australian States occupy a midway position. The rates for the pre-war period 1908-1913 have been added for purposes of comparison :—

CRUDE BIRTH RATES.(a)—VARIOUS COUNTRIES.

Country.	1908 to 1913.	1935.	Country.	1908 to 1913.	1935.
Soviet Union ..	45.6	42.7(d)	Queensland ..	28.2	18.3
Egypt ..	43.6	41.9	Western Australia ..	28.9	18.2
Ceylon ..	36.9	34.4	Czechoslovakia ..	31.1	17.9
Japan ..	32.9	31.6	Scotland ..	26.2	17.8
Rumania ..	43.1	30.7	Denmark ..	27.1	17.7
Portugal ..	34.6	28.7	U.S. of America(b) ..	(c)	16.9
Poland ..	37.4	26.1	New South Wales ..	28.2	16.9
Spain ..	32.1	25.7	Australia ..	27.4	16.6
Argentine Republic ..	37.1	24.8	New Zealand ..	26.5	16.1
Union of South Africa			Switzerland ..	24.7	16.0
(whites) ..	(c)	24.2	Belgium ..	23.4	15.4
Italy ..	32.4	23.3	France ..	19.5	15.2
Netherlands ..	29.1	20.2	Great Britain and		
Canada ..	(c)	20.2	Ireland ..	24.6	15.2
Finland ..	29.5	19.6	Victoria ..	25.3	15.2
Tasmania ..	29.6	19.4	England and Wales..	24.9	14.7
Northern Ireland ..	23.1	19.2	Norway ..	26.0	14.6
Irish Free State ..	23.1	19.2	South Australia ..	27.1	14.1
Germany ..	29.5	18.9	Sweden ..	24.4	13.8

(a) Number of births per 1,000 of the mean population.
registration area."

(c) Not available.

(d) For 1932.

(b) Figures for "existing birth-

(ii) *Nuptial Birth Rates at Child-bearing Ages.* The wide discrepancies between the crude birth rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth rates are calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. A table of results so calculated appeared in Year Book No. 22, p. 941, and showed that Australia, with a rate of 198 nuptial births per 1,000 married women aged 15 to 49 years, was midway between the maximum and minimum of the countries for which these rates were obtained.

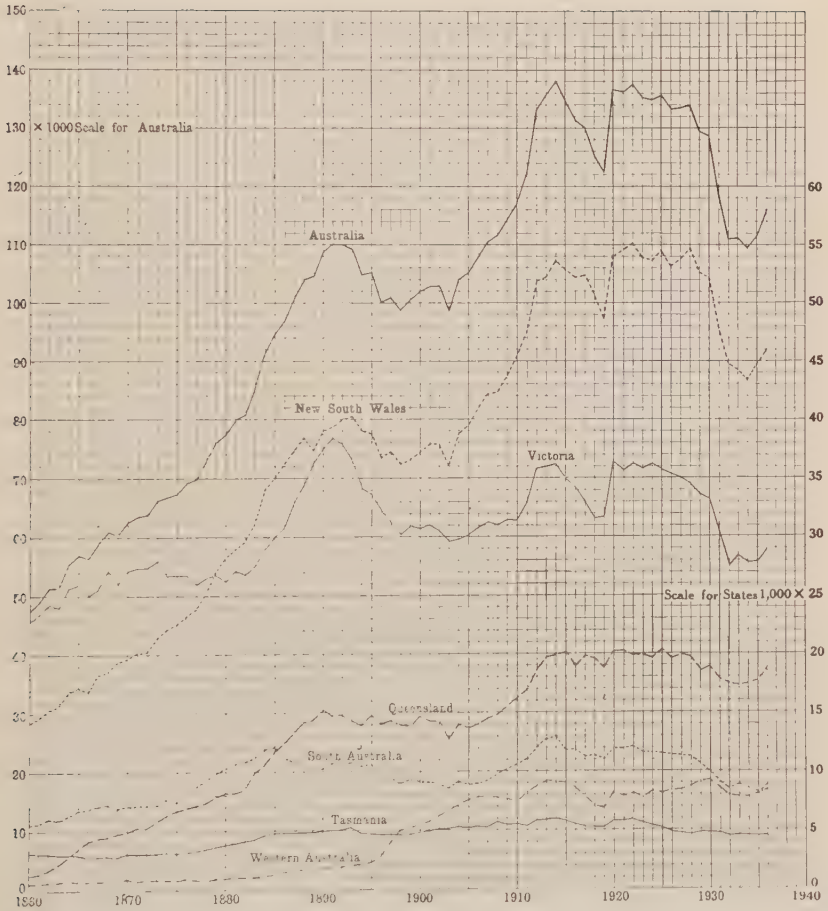
4. *Masculinity of Births.*—(i) *General.* The masculinity of births, i.e., the number of males per 100 females registered, varies considerably from State to State and from year to year. For 1936 the figures ranged from 102.27 in Western Australia to 105.80 in Tasmania. The averages for the last inter-censal period, 1921 to 1933, were as follows :—New South Wales 105.33, Victoria 106.19, Queensland 105.34, South Australia 105.08, Western Australia 105.66, Tasmania 105.59, Australia 105.57. Greater variations are recorded among ex-nuptial births than among nuptial births. The following table shows the figures for Australia at intervals since 1901 :—

MASCULINITY(a) OF BIRTHS REGISTERED, AUSTRALIA.

Particulars.	1901.	1911.	1921.	1931.	1933.	1934.	1935.	1936.
Total Births ..	104.11	104.73	105.86	106.15	105.64	104.14	104.52	104.79
Ex-nuptial Births ..	105.50	103.10	106.09	102.60	102.83	105.72	107.14	101.81

(a) Number of male per 100 female births.

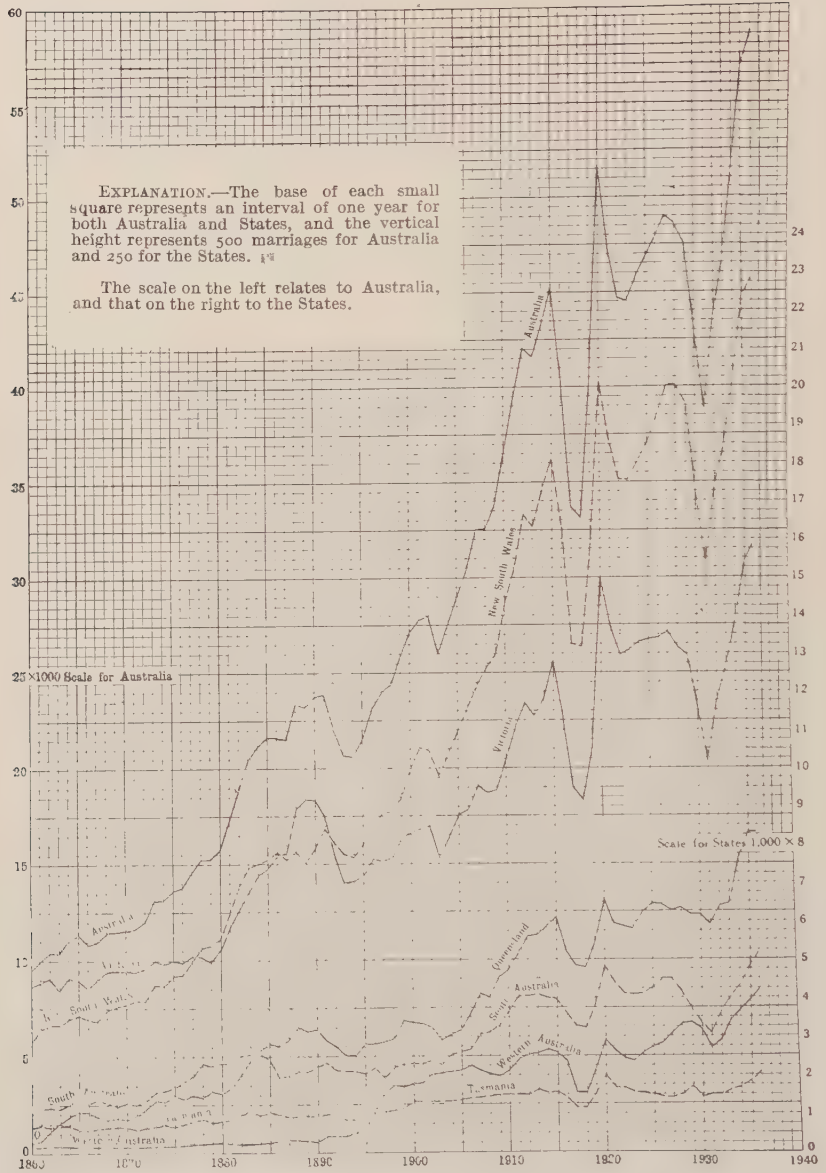
BIRTHS, 1860 TO 1936.



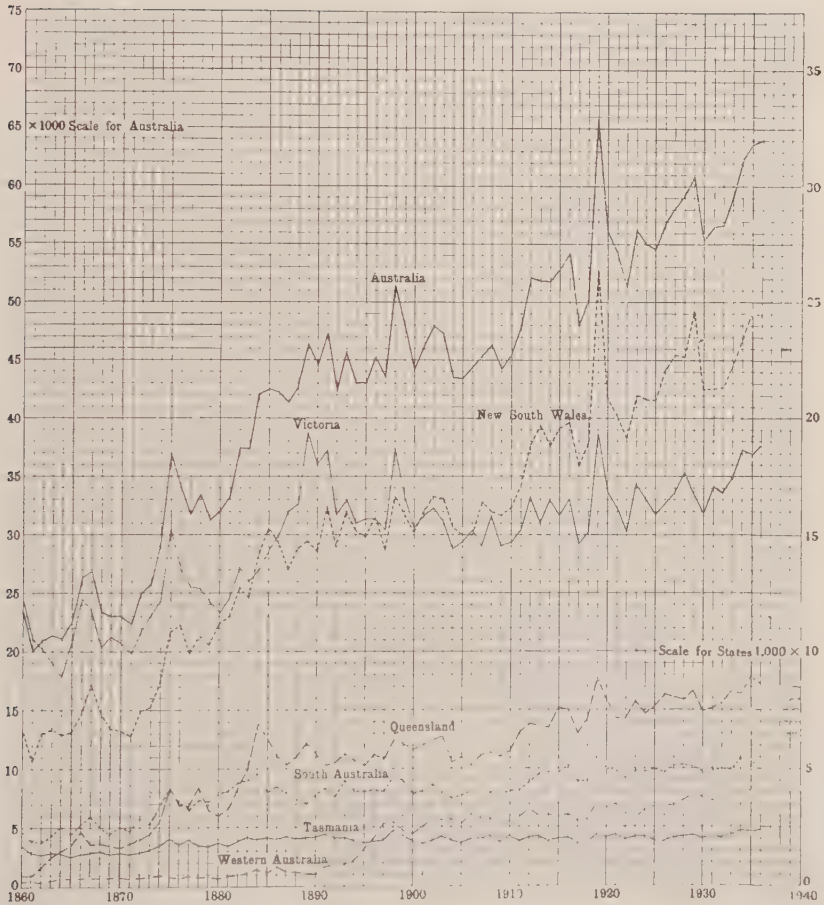
EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 2,000 persons for Australia and 1,000 for the States.

The scale on the left relates to Australia and that on the right to the States.

MARRIAGES, 1860 TO 1936.

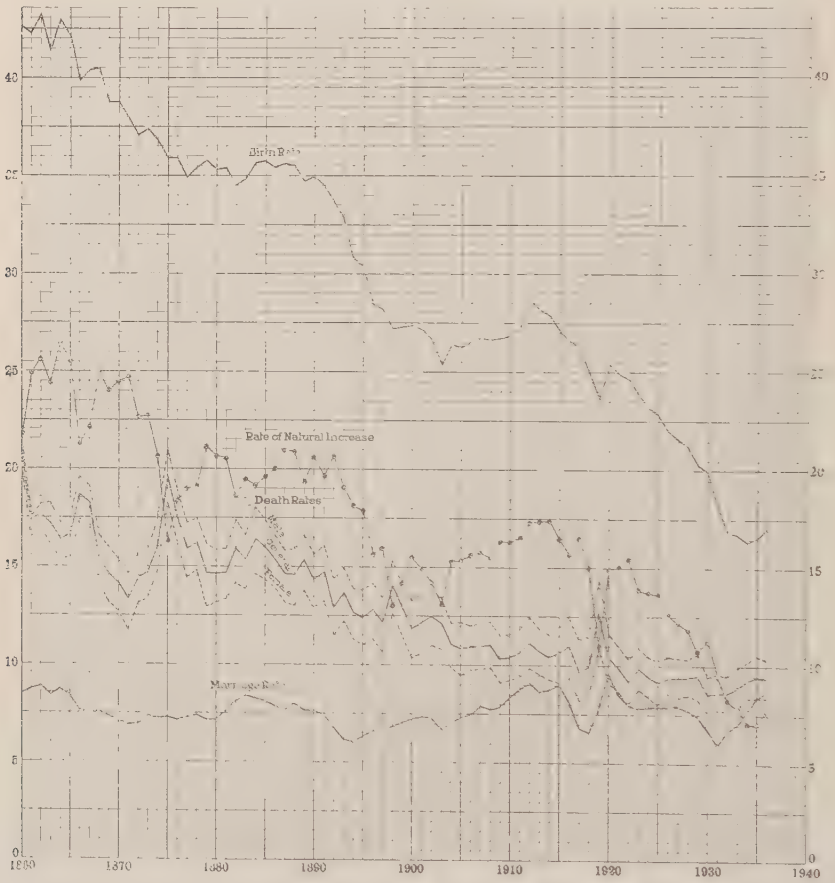


DEATHS, 1860 TO 1936.



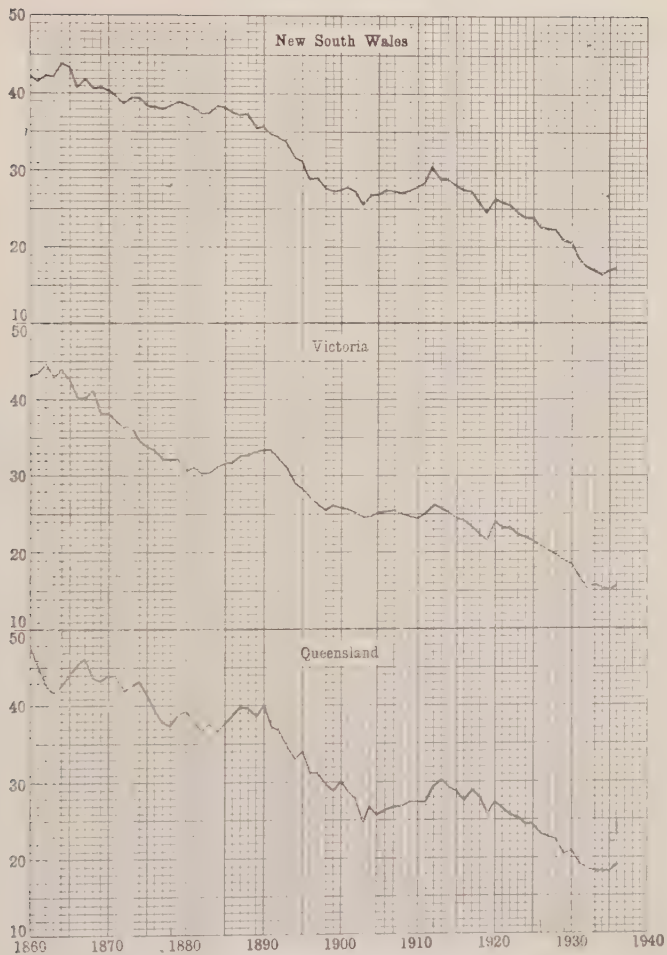
EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 1,000 persons for Australia and 500 for the States. The scale on the left relates to Australia, and that on the right to the States.

RATES—BIRTH, NATURAL INCREASE, DEATH (MALE, GENERAL AND FEMALE) AND MARRIAGE—AUSTRALIA, 1860 TO 1936.



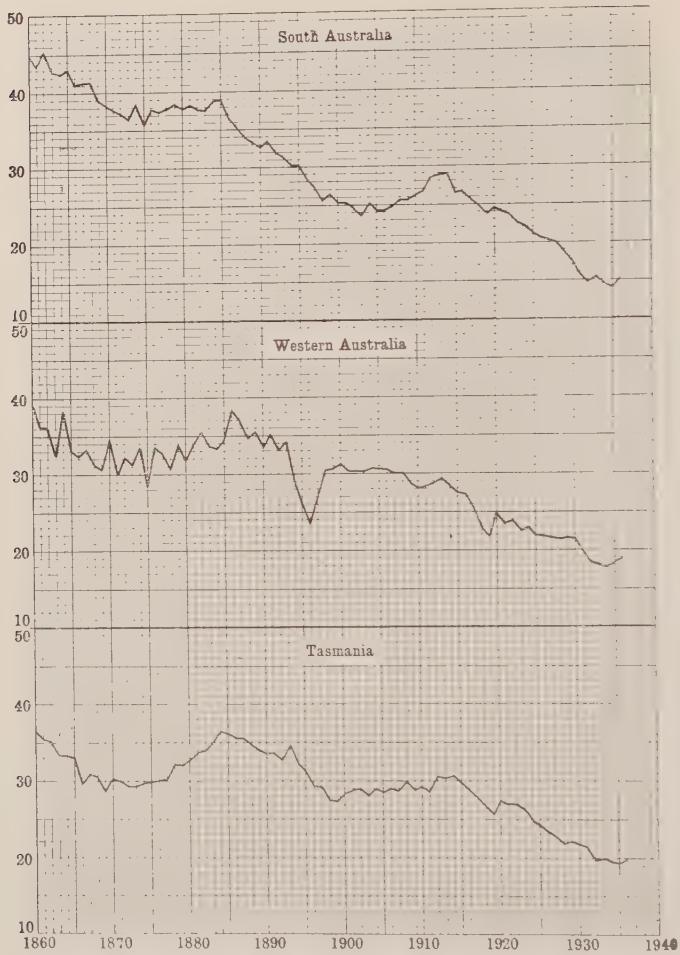
EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one-half per thousand of the population.

BIRTH RATES—STATES, 1860 TO 1936½



STATE BIRTH-RATE GRAPHS.

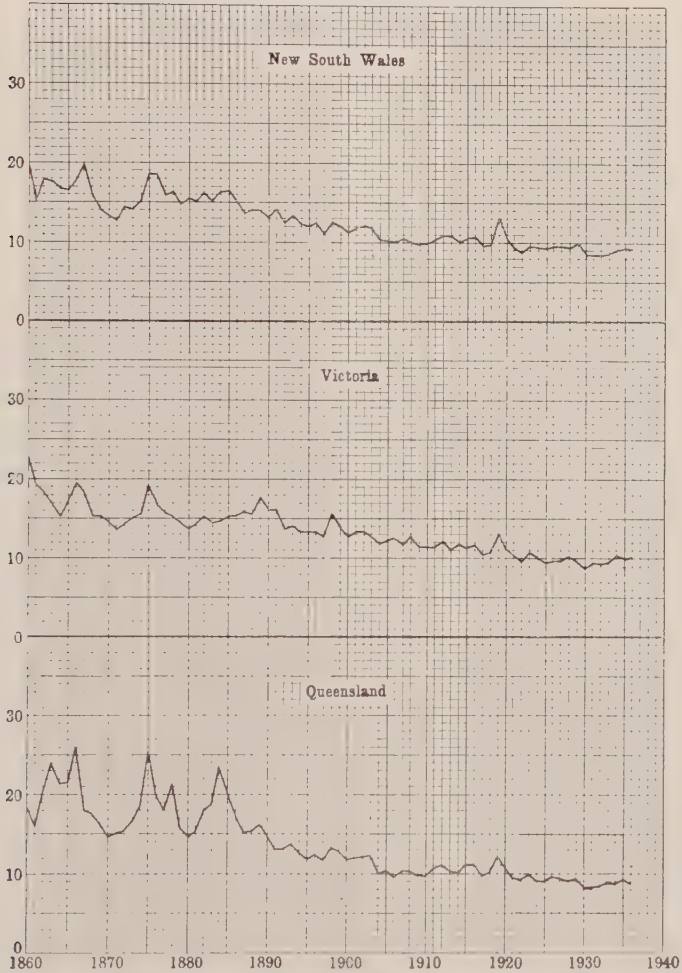
EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being ten per thousand of the population.

BIRTH RATES—STATES, 1860 TO 1936—*continued*.

STATE BIRTH-RATE GRAPHS.

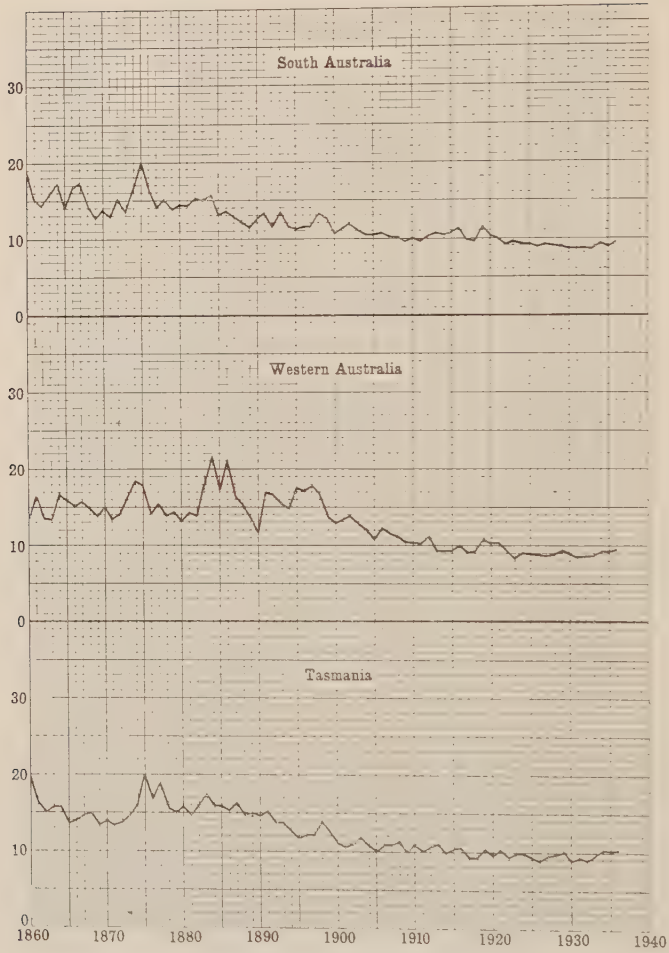
EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being ten per thousand of the population.

DEATH RATES—STATES, 1860 TO 1936.



STATE DEATH-RATE GRAPHS.

EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.

DEATH RATES—STATES, 1860 TO 1936—*continued.*

STATE DEATH-RATE GRAPHS.

EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.

(ii) *Masculinity of Nuptial and Ex-nuptial Births—Various Countries.* A table showing the masculinity of nuptial and ex-nuptial births for various countries appeared on p. 942 of Official Year Book No. 22.

5. *Ex-nuptial Births.*—(i) *General.* The number of ex-nuptial births reached its maximum, 7,438, in 1913, but it has since fallen considerably. On the average during the five years 1910–1914 the number of ex-nuptial births in Australia was 7,171, while for the period 1932–1936 it was only 5,008, a decline of 28.9 per cent., whereas the annual average total births for the same period declined by 13.4 per cent., from 129,156 to 111,815; hence a comparison between the results for these two periods shows that the proportion of ex-nuptial births has fallen from 5.55 to 4.56 per cent. of all births.

The numbers of births and the rates at intervals from 1901 to 1936 are shown below:—

EX-NUPTIAL BIRTHS AND BIRTH RATES, AUSTRALIA.

Particulars.	1901.	1911.	1921.	1931.	1933.	1934.	1935.	1936.
Number of Ex-Nuptial Births ..	6,165	7,074	6,463	5,841	5,239	4,925	4,901	5,126
Percentage on Total Births ..	5.99	5.79	4.75	4.93	4.71	4.50	4.40	4.42

It is, of course, possible that the number of ex-nuptial births is somewhat understated owing to diffidence in proclaiming the fact of ex-nuptiality, and it is not unlikely that the majority of unregistered births are ex-nuptial.

The variations of the ex-nuptial birth rates as between the individual States and Territories for 1936 are as follows:—

EX-NUPTIAL BIRTHS AND BIRTH RATES, 1936.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
Number..	2,092	1,273	908	272	335	218	26	2	5,126
Percentage on Total Births	4.53	4.41	4.84	3.05	3.95	4.76	23.01	1.27	4.42

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45 years. The number of ex-nuptial births per 1,000 unmarried women of ages 15 to 45 has been found to be as follows:—Years 1880–82, 14.49; years 1890–92, 15.93; years 1900–02, 13.30; years 1910–12, 12.53; and years 1920–22, 10.50. The estimated number for the years 1930–32 was 7.87. The comparative results for various countries given on p. 944 of Official Year Book No. 22 were taken from the *Annuaire International de Statistique*, Vols. II. and V., and showed that ex-nuptial births varied from 38 per 1,000 unmarried women aged 15 to 40 years in Hungary to 4 in Ireland and Bulgaria. The rate for Australia was 12 per thousand on the average of the years 1906–15.

(iii) *Comparison of Rates.* The following table showing the relative proportions of ex-nuptial and nuptial births to the total population discloses a much greater proportional reduction in the ex-nuptial birth rate than in the nuptial rate :—

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES.^(a)—AUSTRALIA.

Rates.	1901.	1911.	1921.	1931.	1933.	1934.	1935.	1936.
Ex-nuptial ..	1.63	*1.57	1.18	0.90	0.79	0.74	0.73	0.76
Nuptial ..	25.53	25.63	23.77	17.26	15.99	15.65	15.82	16.37
Total ..	27.16	27.20	24.95	18.16	16.78	16.39	16.55	17.13

(a) Number of births per 1,000 of mean population.

6. *Legitimations.*—In the several States Acts have been passed to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their intentions, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. During 1935, 904 children were legitimized in Australia.

7. *Multiple Births.*—Among the total number of 110,073 births registered in Australia in 1936, there were 113,688 single births, 2,355 twins, and 30 triplets. The number of cases of twins was 1,218, and of triplets 11, there being 81 stillborn twins and 3 stillborn triplets. The total number of mothers was, therefore, 114,917, the proportion of mothers of twins being one in every 94, of mothers of triplets one in every 10,447, and of mothers of all multiple births one in every 94 mothers. Multiple births occurred in 1.07 per cent. of confinements.

The proportion of multiple births to total births does not vary greatly from year to year and exhibits no constant tendency towards increase or decrease :—

MULTIPLE BIRTHS.—AUSTRALIA.

Particulars.	1911.	1921.	1931.	1933.	1934.	1935.	1936.
Mothers of Multiple Births	1,236	1,465	1,271	1,154	1,171	1,157	1,220
Percentage on Total Mothers	1.02	1.09	1.08	1.05	1.08	1.05	1.07
Number of Mothers to each Multiple Birth ..	98	92	92	95	93	95	94

8. *Ages of Parents.*—The relative ages of the parents of children registered in 1930 have been tabulated separately for male and female births, twins and triplets being distinguished from single births. For total births and for multiple births the relative single ages of parents are shown in Australian Demography Bulletin, No. 54, published by this Bureau. In the present work the exigencies of space allow the insertion of a table showing the relative ages of parents of all births in groups of five years only:—

AGES OF PARENTS—ALL BIRTHS.—AUSTRALIA, 1936.

Ages of Fathers and Type of Birth.		Total.	Ages of Mothers.									Un- speci- fied.
			Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.		
Under 20	{ Single Twins	602 3	.. 2	486 3	190 ..	11 ..	3 ..	..	..	..	..
20 to 24	{ Single Twins	14,278 98	6 ..	3,247 22	9,281 64	1,582 12	138 ..	21 ..	3 ..	..	..
25 to 29	{ Single Twins Triplets	30,792 284 6	2	1,600 12 1	13,145 111 3	13,658 141 2	2,128 19 ..	243 1 ..	16 .. ..	..	..
30 to 34	{ Single Twins Triplets	27,712 301 3	1	418 3 ..	4,696 35 ..	11,843 128 2	9,244 118 ..	1,416 16 1	90 1 ..	4 ..	..
35 to 39	{ Single Twins	18,465 250	.. ..	97 1	1,262 9	4,200 41	6,880 103	5,433 86	576 10	15 ..	..
40 to 44	{ Single Twins Triplets	9,632 126 1	.. .. ..	25	342 2 ..	1,065	2,444 31 ..	3,795 57 1	1,909 27 ..	52 1 ..	..
45 to 49	{ Single Twins Triplets	4,732 97 1	.. .. ..	16	152	415 1 ..	861 10 ..	1,691 41 ..	1,391 13 1	206 2 ..	..
50 to 54	{ Single Twins	1,602 25	.. ..	5 ..	51 ..	128 1	255 3	526 12	538 8	99 1	..
55 to 59	{ Single Twins	519 10	.. ..	.. ..	19 1	43 ..	76 ..	167 4	169 5	45 ..	..
60 to 64	{ Single Twins	158 3	.. ..	3 ..	5 ..	17 1	22 ..	50 2	49 ..	12 ..	..
65 and upwards	{ Single	79	..	1	3	12	12	26	19	6	..	
Mothers of Nuptial Children	{ Single Twins Triplets Total	108,661 1,167 11 109,839	11 11	5,900 17 1 5,942	29,146 232 3 29,371	32,974 333 4 33,311	22,063 284 2 22,347	13,368 219 1 13,589	4,700 64 1 4,825	439 4 .. 443	..	
Mothers of ex- nuptial Children	{ Single Twins Total	5,027 51 5,078	24 .. 24	1,385 0 1,394	1,828 16 1,844	839 10 849	444 7 451	339 7 346	137 2 139	26 .. 26	5 .. 5	
Total Mothers	{ Single Twins Triplets	113,688 1,218 11	35	7,285 50 1	30,974 238 3	33,813 343 4	22,507 291 ..	13,707 226 2	4,897 66 1	465 4 ..	5 .. 5	
Total	..	114,917	35	7,336	31,215	34,160	22,798	13,935	4,964	469	5	

9. **Birthplaces of Parents.**—The birthplaces of the parents of children whose births were registered during the year 1936 will be found in Australia

Demography Bulletin No. 54, published by this Bureau. A summary of the results of the tabulation with the addition of the corresponding figures for 1911 follows:—

BIRTHPLACES OF PARENTS.—AUSTRALIA.

Birthplace.	Fathers.		Mothers of Nuptial Children.		Mothers of Ex-nuptial Children.	
	1911.	1936.	1911.	1936.	1911.	1936.
AUSTRALASIA—						
Australia	94,834	93,791	102,073	98,463	6,570	4,771
New Zealand	1,257	812	1,201	629	68	24
EUROPE—						
England and Wales ..	9,849	8,657	6,067	6,259	210	173
Scotland	2,289	2,457	1,486	1,872	46	39
Ireland	2,138	925	1,374	552	46	12
Other British Possessions ..	49	141	20	69	1	1
Western Europe	607	204	165	73	9	4
Central Europe	1,185	334	606	184	8	5
Southern Europe	360	1,497	203	1,107	6	11
Eastern Europe	168	122	81	50	..	2
ASIA—						
British Possessions ..	217	199	114	87	2	1
Foreign Countries ..	317	165	139	100	3	4
AFRICA—						
British Possessions ..	111	238	116	158	2	4
Foreign Countries ..	11	18	13	13	..	1
AMERICA—						
Canada	59	77	34	54	3	3
Other British Possessions ..	8	8	5	3	..	..
United States of America ..	182	107	87	79	3	2
Other Foreign Countries ..	70	29	19	18	1	1
POLYNESIA—						
British	30	26	21	32	1	..
Foreign	39	16	13	20	6	1
Indefinite	159	16	102	11	33	13
Total	113,939	109,839	113,939	109,839	7,018	5,078

10. Occupations of Fathers.—A summary of the main groups of occupations of the fathers of all nuptial children whose births were registered in 1921, 1931 and 1936, together with the percentage of each class on the total, is given in the following table:—

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.—AUSTRALIA.

Occupation Group.	Number of Fathers.			Percentage on Total.		
	1921.	1931.	1936.	1921.	1931.	1936.
				%	%	%
Agricultural, Pastoral, Mining, etc.	32,495	24,760	22,589	25.25	22.21	20.57
Industrial	53,567	49,902	21,800	41.74	44.76	19.85
Transport and Communication	15,351	12,302	10,243	11.96	11.04	9.32
Commercial	18,293	16,030	11,285	14.26	14.38	10.27
Professional	6,204	5,991	6,041	4.84	5.37	5.50
Domestic	2,319	2,146	1,785	1.81	1.93	1.63
Indefinite	182	349	230,090	0.14	0.31	232.80
Total	128,326	111,480	109,839	100.00	100.00	100.00

(a) Includes 35,777 (32.57 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

11. *Mother's Age, Duration of Marriage, and Issue.*—(i) *General.* The total number of nuptial confinements excluding stillbirths in 1936 was 114,017, viz., 113,688 single births, 1,218 cases of twins, and 11 cases of triplets. Ex-nuptial children—previous issue by the same father—are included as previous issue, but children by former marriages and stillborn children are excluded. The tables cannot be given in detail but the following are their most salient features. More complete tabulations are shown in Australian Demography Bulletin No. 54 issued by this Bureau.

(ii) *Duration of Marriage and Issue of Mothers.* The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to between 32 and 33 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1936 was 2.65 compared with 2.74 in 1935, 2.83 in 1934, 2.89 in 1933, and 2.95 in 1932.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS.—AUSTRALIA, 1936.

Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.	Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.
Years.				Years.			
0-1 ..	19,951	20,128	1.01	17-18 ..	1,117	7,263	6.50
1-2 ..	14,514	17,766	1.22	18-19 ..	770	5,347	6.94
2-3 ..	11,572	19,366	1.67	19-20 ..	615	4,584	7.45
3-4 ..	9,241	18,625	2.02	20-21 ..	611	4,698	7.69
4-5 ..	7,481	17,691	2.36	21-22 ..	493	3,858	7.83
5-6 ..	6,285	16,724	2.66	22-23 ..	361	3,117	8.63
6-7 ..	6,034	17,406	2.88	23-24 ..	224	1,989	8.88
7-8 ..	5,285	16,919	3.20	24-25 ..	170	1,025	9.56
8-9 ..	4,600	16,251	3.53	25-26 ..	109	1,086	9.96
9-10 ..	4,159	15,789	3.80	26-27 ..	64	676	10.56
10-11 ..	3,532	14,322	4.05	27-28 ..	28	284	10.14
11-12 ..	2,832	12,561	4.44	28-29 ..	12	137	11.42
12-13 ..	2,402	11,757	4.78	29-30 ..	10	118	11.80
13-14 ..	2,052	10,502	5.12	30-31 ..	3	31	10.33
14-15 ..	2,024	11,015	5.44	31-32 ..	1	11	11.00
15-16 ..	1,738	10,037	5.78	32-33 ..	1	11	11.00
16-17 ..	1,488	8,965	6.02				
				Total ..	109,839	290,659	2.65

(iii) *Ages of Mothers and Issue.* The following table shows the average number of children borne by mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother, but with the increase

of the age of the mother the number of issue has fallen in comparison with past years. During the period 1911 to 1936 the average issue of mothers of all ages has fallen by 20.69 per cent.—from 3.34 in 1911 to 2.65 in 1936:—

AGES AND ISSUE OF MOTHERS.—AUSTRALIA.

Ages of Mothers.		Average Number of Children.				Ages of Mothers.		Average Number of Children.			
		1911.	1921.	1931.	1936.			1911.	1921.	1931.	1936.
Under 20 years	..	1.18	1.16	1.21	1.10	40-44 years	..	6.97	6.27	6.00	5.91
20-24 years	..	1.77	1.64	1.74	1.64	45 years and over	..	8.52	8.04	7.48	7.46
25-29 "	..	2.64	2.44	2.40	2.35						
30-34 "	..	3.82	3.57	3.44	3.11						
35-39 "	..	5.28	4.95	4.71	4.35	All Ages	..	3.34	3.08	2.95	2.65

(iv) *Previous Issue of Mothers, Various Ages.* The previous issue, according to the age of the mother, is given in the following table:—

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES.—AUSTRALIA, 1936.

Previous Issue.	Mothers' Ages.							Total.
	Under 20 Years.	20-24 Years.	25-29 Years.	30-34 Years.	35-39 Years.	40-44 Years.	45 Years and Over.	
0	4,921	16,638	12,091	4,816	1,606	320	18	41,010
1	944	8,303	9,327	5,589	1,985	376	20	26,604
2	83	3,112	5,099	4,222	2,245	488	23	15,872
3	4	971	2,994	3,068	2,148	601	30	9,816
4	1	232	1,581	1,918	1,630	581	47	5,990
5	..	45	662	1,276	1,325	566	48	3,922
6	..	7	259	739	959	477	45	2,480
7	..	2	67	403	715	415	48	1,650
8	..	..	26	198	459	331	30	1,044
9	..	1	2	81	266	246	40	636
10	..	..	3	26	140	177	32	378
11	..	..	..	10	68	112	25	215
12	..	..	..	1	26	74	16	117
13	..	..	..	..	12	31	9	52
14	..	..	..	..	5	12	11	28
15	..	..	..	..	..	13	1	14
16	..	..	..	..	..	1	..	1
17	..	..	..	..	..	3	..	3
18	..	..	..	..	..	1	..	1
Total Mothers	5,953	29,371	33,311	22,347	13,589	4,825	443	109,839

(v) *Previous Issue of Mothers of Twins and Triplets.* Figures regarding the previous issue of married mothers of twins and triplets show that 348 mothers had twins at their first confinement; 252 at their second; 197 at their third; 124 at their fourth; 85 at their fifth; 53 at their sixth; 34 at their seventh; 30 at their eighth; 18 at their ninth; 7 at their tenth; 7 at their eleventh; 4 at their twelfth; 1 at their thirteenth; and 1 at her fourteenth.

Of the 11 cases of triplets registered during 1936, 4 were first and 3 second confinements, 1 was a third and 1 a fourth confinement while 2 were seventh confinements.

12. *Interval between Marriage and First Birth.*—(i) *Interval.* The following table shows the interval between marriage and first birth for the years 1911, 1921, 1931 and 1936 respectively. Twins, triplets and quadruplets are included, the eldest only being enumerated :—

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH.—AUSTRALIA.

Interval.	Number of First Children.				Percentage on Total.			
	1911.	1921.	1931.	1936.	1911.	1921.	1931.	1936.
Under 1 month ..	562	437	395	275	1.81	1.07	1.15	0.67
1 month ..	608	538	523	420	1.96	1.31	1.52	1.02
2 months ..	817	735	750	639	2.63	1.79	2.17	1.56
3 " ..	1,125	1,017	1,135	997	3.63	2.48	3.29	2.43
4 " ..	1,299	1,336	1,409	1,392	4.19	3.26	4.09	3.39
5 " ..	1,651	1,781	1,968	2,097	5.33	4.34	5.71	5.11
6 " ..	2,089	2,420	2,517	2,969	6.74	5.90	7.30	7.24
7 " ..	1,602	2,231	2,022	2,275	5.17	5.44	5.86	5.55
8 " ..	1,529	1,950	1,139	1,538	4.93	4.75	3.30	3.75
9 " ..	3,351	4,222	2,272	2,852	10.84	10.29	6.59	6.96
10 " ..	2,623	3,630	1,859	2,364	8.46	8.85	5.39	5.77
11 " ..	1,893	2,645	1,636	1,996	6.11	6.45	4.74	4.87
Total under 1 year	19,159	22,942	17,625	19,814	61.80	55.93	51.11	48.37
1-2 years ..	7,400	11,149	8,888	11,410	23.87	27.18	25.77	27.82
2-3 " ..	2,101	2,923	3,441	4,445	6.78	7.13	9.98	10.31
3-4 " ..	908	1,413	1,823	2,127	2.93	3.45	5.29	5.19
4-5 " ..	471	837	967	1,007	1.52	2.04	2.80	2.45
5-9 " ..	762	1,473	1,424	1,836	2.46	3.59	4.13	4.48
10-14 " ..	159	223	262	300	0.51	0.54	0.76	0.73
15-19 " ..	31	54	50	62	0.10	0.13	0.14	0.15
20 years and over	9	4	6	9	0.03	0.01	0.02	0.02
Total ..	31,000	41,018	34,486	41,010	100.00	100.00	100.00	100.00

The masculinity of first births was 105.43 as compared with 104.79 for total births.

(ii) *Ages of Mothers and Interval.* The previous issue of mothers of ex-nuptial children is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shows in a condensed form the ages of mothers in cases of ex-nuptial births, of nuptial first births occurring less than nine months after marriage, and of all nuptial and ex-nuptial first births. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage shows that for all ages the ratio was 2 to 3. At all ages up to and including 21, however, there was a preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births is necessarily included among the births which occurred less than nine months after marriage, but information in connexion therewith is not available, and the figures in the table must be accepted with this reservation. The tabulation in single ages of mothers appears in *Demography Bulletin No. 54*, published by this Bureau.

The last four columns show the percentage of births following ante-nuptial conception on the total nuptial first births and ex-nuptial births. These columns disclose the remarkable fact that the percentage of births due to ante-nuptial conception diminishes rapidly from about 80 per cent. among mothers under 20 years of age to a minimum of about 20 per cent. among mothers 25 to 34 years and then rises rapidly to nearly 70 per cent. for mothers 45 years and over.

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, ETC.—AUSTRALIA.

Age of Mother at Birth of Child.	1936.				Percentage Column III. on Column IV.			
	Ex- nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial First Births and Ex-nuptial Births.	1911.	1921.	1931.	1936.
	I	II.	III.	IV.	%	%	%	%
Under 20 years	1,426	3,652	5,078	6,347	83.12	79.23	82.60	80.01
20 to 24 years	1,859	6,345	8,204	18,497	53.91	45.82	48.43	44.35
25 to 29 "	859	1,884	2,743	13,550	32.50	25.60	21.89	20.24
30 to 34 "	457	507	964	5,273	28.06	23.05	22.20	18.28
35 to 39 "	353	170	523	1,959	32.64	29.43	30.86	26.70
40 to 44 "	141	42	183	461	36.56	35.31	38.95	39.70
45 and over ..	31	2	33	49	60.47	54.84	48.89	67.35
Total ..	5,126	12,602	17,728	46,136	48.14	39.74	43.80	38.43

13. Interval between Birth and Registration of Birth.—Detailed information for the years 1911 to 1921 regarding the period which elapsed between birth and registration of birth was contained in Demography Bulletins issued by this Bureau for those years. The average interval for the year 1921 was 14.22 days for all children. Although no complete measurements have been made since 1921 it may be assumed that the interval has decreased to about 13 days.

§ 2. Marriages.

1. Marriages, 1936.—The number of marriages registered in Australia during the year ended the 31st December, 1936, was 58,700, giving a rate of 8.66 per 1,000 of the mean population for the year. A summary of the number of marriages in each State and Territory at intervals since 1901 is given in the following table:—

MARRIAGES.—SUMMARY, 1901 to 1936.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Aus- tralia.
1901 ..	10,538	8,406	3,341	2,304	1,821	1,338	5	(a)	27,753
1911 ..	15,278	11,088	5,167	4,036	2,421	1,477	10	5	39,482
1921 ..	18,506	13,676	5,963	4,383	2,656	1,668	15	2	46,869
1931 ..	15,377	10,182	5,951	3,009	2,741	1,501	25	36	38,882
1932 ..	17,362	11,744 [†]	6,415	3,636	2,904	1,508	22	43	43,634
1933 ..	18,399	12,668	6,471	3,973	3,374	1,629	28	53	46,595
1934 ..	20,210	13,862	7,035	4,310	3,682	1,678	30	58	51,405
1935 ..	22,361	15,409	8,280	4,845	3,940	1,875	42	74	56,826
1936 ..	22,873	15,915	8,306	5,182	4,242	2,073	41	77	58,709

(a) Part of New South Wales.

2. **Crude Marriage Rates.**—The crude marriage rates for each State and Territory for a series of years are given hereunder:—

CRUDE MARRIAGE RATES. (a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
1901 ..	7.73	6.99	6.66	6.45	9.68	7.76	1.05	..	7.32
1911 ..	9.19	8.40	8.41	9.80	8.44	7.77	3.02	2.81	8.79
1921 ..	8.78	8.90	7.82	8.82	7.95	7.82	3.83	0.80	8.59
1924 ..	8.05	8.10	7.66	7.82	7.15	7.07	4.57	1.02	7.89
1925 ..	8.07	8.00	7.73	7.88	7.36	6.98	5.22	2.29	7.89
1926 ..	8.19	7.90	7.50	8.13	7.47	6.71	3.55	2.74	7.90
1927 ..	8.34	7.88	7.21	7.96	7.93	6.72	5.84	3.88	7.93
1928 ..	8.16	7.53	7.14	7.26	8.12	6.97	5.16	3.54	7.71
1929 ..	7.80	7.31	6.87	6.50	8.00	7.86	4.48	5.03	7.43
1930 ..	6.86	6.52	6.81	5.78	7.47	6.56	6.23	3.79	6.69
1931 ..	6.02	5.66	6.43	5.33	6.34	6.68	5.04	4.09	5.96
1932 ..	6.73	6.49	6.86	6.29	6.68	6.64	4.47	4.82	6.63
1933 ..	7.07	6.96	6.84	6.84	7.69	7.13	5.76	5.85	7.03
1934 ..	7.70	7.57	7.99	7.39	8.34	7.32	6.08	6.26	7.71
1935 ..	8.45	8.38	8.57	8.28	8.85	8.17	8.23	7.89	8.45
1936 ..	8.57	8.61	8.49	8.82	9.43	8.98	7.80	7.89	8.66

(a) Number of marriages (not persons married) per 1,000 of mean annual population

As in some international tabulations the marriage rates are calculated per 1,000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for Australia for the last four census periods for which the particulars are available. The figures comprise in each case the census year with the year immediately preceding and the year immediately following, and are as follows:—Years 1880–82, 48.98; years 1890–92, 45.74; years 1900–02, 42.14; years 1910–12, 50.44; years 1920–22, 56.02; and years 1932–34, 42.88. These rates refer, of course, to persons married, and not to marriages as is the case in the preceding table.

3. **Marriage Rates in Various Countries.**—The following table shows the marriage rate for Australia for the year 1935 in comparison with the rates for various other countries:—

CRUDE MARRIAGE RATES. (a)—VARIOUS COUNTRIES.

Country.	1908 to 1913.	1935.	Country.	1908 to 1913.	1935.
Soviet Union ..	8.6	10.6(e)	United States (b) ..	(d)	7.9(f)
Union of South Africa(c)	(d)	10.4	Finland ..	6.1	7.8(g)
Germany ..	7.8	9.7	Scotland ..	6.7	7.7
Denmark ..	7.3	9.3	Japan ..	9.3	7.7
Western Australia ..	8.1	8.8	Belgium ..	7.9	7.6(g)
Rumania ..	9.5	8.7	Czechoslovakia ..	7.7	7.4
Queensland ..	8.2	8.6	Switzerland ..	7.3	7.3
England and Wales ..	7.6	8.6	Netherlands ..	7.5	7.2
Australia ..	8.4	8.4	Canada ..	(d)	7.1
Great Britain and			Norway ..	6.2	7.1
Ireland ..	7.3	8.4	Northern Ireland ..	5.2	6.9
New South Wales ..	8.8	8.4	France ..	7.9	6.8
Victoria ..	8.0	8.4	Portugal ..	6.9	6.8
Poland ..	7.0	8.3	Italy ..	7.7	6.7
South Australia ..	9.1	8.3	Argentine Republic ..	6.8	6.7(g)
Sweden ..	6.0	8.2	Spain ..	7.0	6.1
New Zealand ..	8.5	8.2	Ceylon ..	5.2	5.5(g)
Tasmania ..	7.9	8.2	Irish Free State ..	5.2	4.7

(a) Number of marriages per 1,000 of mean population.
population only.

(d) Not available.

(e) For 1929.

(b) Registration area.
(f) For 1932.

(c) White
(g) For 1934.

4. *Ages and Conjugal Condition at Marriage.*—(i) *General.* The ages at marriage of bridegrooms and brides will be found in Australian Demography Bulletin, No. 54, published by this Bureau. A summary in age-groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 2,659 males who were less than twenty-one years of age married during 1936, while the corresponding number of females was 12,022. At the other extreme there were 61 men of sixty-five years and upwards who described themselves as bachelors, and 24 spinsters of corresponding age.

Information regarding the percentage distribution of bridegrooms and brides is shown in the last five lines of the table for the years 1911, 1921, 1931, 1935 and 1936.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1936.

Ages at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20.	1,287	1	..	1,288	8,193	3	..	8,196
20-24 years	17,696	30	12	17,738	25,779	40	79	25,898
25-29 "	20,885	142	126	21,153	14,175	167	300	14,642
30-34 "	8,785	255	272	9,312	4,326	229	338	4,893
35-39 "	3,400	391	278	4,069	1,626	328	274	2,228
40-44 "	1,234	382	239	1,855	697	307	186	1,190
45-49 "	640	443	209	1,292	340	288	88	716
50-54 "	301	346	73	720	123	230	36	389
55-59 "	153	312	49	514	94	154	20	268
60-64 "	66	239	14	319	37	111	9	157
65 years and over ..	61	376	12	449	24	107	1	132
Total ..	54,508	2,917	1,284	58,709	55,414	1,964	1,331	58,709
Percentage on Total	%	%	%	%	%	%	%	%
1911 ..	93.70	5.84	0.46	100.00	94.60	4.68	0.72	100.00
1921 ..	92.43	6.37	1.20	100.00	92.85	5.91	1.24	100.00
1931 ..	92.04	6.09	1.87	100.00	93.89	4.02	2.09	100.00
1935 ..	92.98	4.89	2.13	100.00	94.47	3.20	2.33	100.00
1936 ..	92.84	4.97	2.19	100.00	94.39	3.34	2.27	100.00

(ii) *Relative Ages, Bridegrooms and Brides.* The relative ages of bridegrooms and brides are shown for single years in Australian Demography Bulletin, No. 54; a condensation into age-groups of five years is given below:—

RELATIVE AGES OF PERSONS MARRIED.—AUSTRALIA, 1936.

Ages of Bridegrooms.	Total Bridegrooms.	Ages of Brides.							
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.
Under 20 years	1,288	4	876	371	32	5	..	..	..
20 to 24 "	17,738	7	4,703	10,948	1,893	158	20	5	4
25 to 29 "	21,153	2	1,942	10,035	7,322	1,081	141	20	10
30 to 34 "	9,312	3	487	2,860	3,594	1,812	453	79	24
35 to 39 "	4,069	1	125	743	1,219	1,034	688	191	68
40 to 44 "	1,855	..	27	200	337	439	398	307	147
45 to 49 "	720	1	10	97	150	228	280	200	200
50 to 54 "	319	..	5	26	57	73	135	169	255
55 to 59 "	514	..	..	12	20	13	64	70	206
60 to 64 "	319	..	2	1	12	9	30	42	223
65 years and over ..	449	..	1	5	6	11	19	38	369
Total Brides	58,709	18	8,178	25,898	14,642	4,893	2,228	1,190	1,662

(iii) *Average Ages, Bridegrooms and Brides:* The age at marriage of brides has declined slightly during recent years to an average of just over 25 years. The figures for the past five years are:—1932, 25.41; 1933, 25.42; 1934, 25.95; 1935, 25.79; and 1936, 25.23. For the five years 1907-11 the average age was 25.70 years compared with 25.92 years for the five years 1912-16, 26.07 years for the five years 1917-21, and 25.76 years for the five years 1925-29. The average age of bridegrooms was in 1932, 29.06; in 1933, 29.07; in 1934, 29.24; in 1935, 29.25; and in 1936, 28.76 years. It follows, therefore, that brides are, generally speaking, three and one-half years younger than bridegrooms.

5. *Previous Conjugal Condition.*—The number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1936, has already been given. The following table shows the conjugal condition of the contracting parties:—

PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1936.

Conjugal Condition of Bridegrooms.			Total Bridegrooms.	Brides.		
				Spinsters.	Widows.	Divorced.
Bachelors .. ..	..	..	54,508	52,558	1,022	928
Widowers .. ..	..	..	2,917	1,873	825	219
Divorced .. ..	..	..	1,284	983	117	184
Total Brides ..	..	..	58,709	55,414	1,964	1,331

6. *Birthplaces of Persons Married.*—The following table shows the birthplaces of persons who were married in 1911, 1921 and 1936. In Australian Demography Bulletin, No. 54, the relative birthplaces of bridegrooms and brides married in 1936 will be found tabulated in detail:—

BIRTHPLACES OF PERSONS MARRIED.—AUSTRALIA.

Birthplace.			Bridegrooms.			Brides		
			1911.	1921.	1936.	1911.	1921.	1936.
AUSTRALASIA—								
Australia .. ..	..	..	31,298	37,925	50,367	33,922	40,137	53,686
New Zealand .. ..	..	..	450	405	564	303	280	386
EUROPE—								
England and Wales ..	..	..	3,023	3,590	4,628	1,675	2,488	2,878
Scotland .. ..	..	..	739	867	1,324	460	656	836
Ireland .. ..	..	..	494	470	411	363	281	202
Other British Possessions	..	..	16	30	53	9	14	14
Western Europe .. ..	..	..	205	175	108	45	45	23
Central Europe .. ..	..	..	311	149	171	92	61	67
Southern Europe .. ..	..	..	62	139	536	21	56	284
Eastern Europe .. ..	..	..	47	83	76	18	21	36
ASIA—								
British Possessions ..	..	..	59	59	82	27	24	47
Foreign Countries .. ..	..	..	83	57	60	16	12	41
AFRICA—								
British Possessions ..	..	..	42	58	112	20	39	82
Foreign Countries .. ..	..	..	1	3	10	2	5	8
AMERICA—								
Canada .. ..	..	..	44	45	76	6	11	27
Other British Possessions	..	..	6	8	4	..	5	1
United States of America	..	..	58	90	66	16	25	35
Other Foreign Countries ..	..	..	44	11	15	15	10	6
POLYNESIA—								
British .. ..	..	..	13	9	18	7	11	23
Foreign .. ..	..	..	25	18	12	7	13	10
Indefinite .. ..	..	..	41	22	16	37	19	17
Total .. ..	..	..	37,061	44,213	58,709	37,061	44,213	58,709

7. Occupations and Ages of Bridegrooms.—On the experience of 1931 the average ages at marriage of bridegrooms in the larger classes of occupations were as follows:—Professional, 30.01 years; Domestic, 30.47 years; Commercial, 29.20 years; Transport, 28.71 years; Industrial, 28.08 years; and Primary Producers, 30.15 years.

8. Fertility of Marriages.—The quotient obtained by division of the nuptial births registered, e.g., during the five years 1932 to 1936, by the number of marriages registered during the five years 1927 to 1931, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 2.29—in other words, the number of children to be expected from every marriage in Australia is under three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation. For the following five-yearly periods the results were:—1927–31, 2.80; 1928–32, 2.53; 1929–33, 2.91; 1930–34, 2.58; 1931–35, 2.54; and 1932–1936, 2.29.

9. Celebration of Marriages.—In all the States marriages may be celebrated either by ministers of religion whose names are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The registered ministers in 1936 belonged to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation and are bracketed under the heading "Other Christian." The figures for 1936 are shown in the following table:—

MARRIAGES IN EACH DENOMINATION, 1936.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Nor. Ter.	F.C.T.	Australia.	
									No.	Per Cent.
Church of England ..	9,444	4,621	2,537	1,244	1,669	804	4	39	20,302	34.68
Roman Catholic ..	4,797	2,940	1,891	624	757	345	17	20	11,391	19.40
Methodist ..	2,605	2,490	1,345	1,639	668	326	10	2	9,085	15.47
Presbyterian ..	2,711	2,729	1,232	213	310	148	1	10	7,354	12.53
Baptist ..	386	627	196	192	83	87	..	..	1,571	2.68
Congregational ..	445	249	138	250	103	63	..	..	1,248	2.13
Church of Christ ..	144	406	79	236	55	21	5	..	940	1.61
Lutheran ..	50	91	213	229	1	..	..	..	584	0.99
Salvation Army ..	116	117	91	41	27	17	..	..	409	0.70
Seventh-Day Adventist ..	55	22	15	9	11	5	..	..	117	0.20
Greek Catholic ..	26	24	28	7	17	..	..	..	102	0.17
Unitarian ..	4	49	..	13	..	..	..	..	66	0.11
Other Christian ..	153	103	179	51	28	32	..	..	546	0.93
Hebrew ..	47	50	3	1	9	..	..	..	110	0.19
Registrar's Office ..	1,890	1,397	359	433	504	225	4	6	4,818	8.21
Total ..	22,873	15,915	8,306	5,182	4,242	2,073	41	77	58,709	100.00
Marriages celebrated by Ministers of Religion ..	..	..	..	..	..	..	..	..	..	..
per cent. ..	91.74	91.22	95.68	91.64	88.12	89.15	90.24	92.21	91.79	..
Marriages celebrated by Civil Officers ..	..	..	..	..	..	..	..	..	..	..
per cent. ..	8.26	8.78	4.32	8.36	11.88	10.85	9.76	7.79	8.21	..

§ 3. Deaths.

1. Deaths, 1936.—The following table shows the number of deaths, male and female, registered in each State during the year :—

DEATHS, 1936.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia
Male ..	13,618	9,000	5,008	2,001	2,611	1,310	51	27	35,651
Female ..	10,758	8,782	3,525	2,503	1,619	1,068	9	17	28,281
Total ..	24,376	18,778	8,593	5,464	4,230	2,387	60	44	63,932

A summary of the total number of deaths in each State and Territory at intervals since 1901 is given in the following table :—

DEATHS—SUMMARY 1901-1936.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia.
1901 ..	16,021	15,904	6,007	3,974	2,519	1,814	91	(a)	46,330
1911 ..	17,146	15,216	6,544	4,038	2,923	1,927	65	10	47,869
1921 ..	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076
1931 ..	21,270	17,033	7,525	4,888	3,681	2,057	70	39	56,560
1932 ..	21,343	16,805	7,813	4,957	3,715	2,022	73	29	56,757
1933 ..	22,322	17,456	8,354	4,904	3,700	2,102	61	38	59,117
1934 ..	23,474	18,648	8,192	5,403	4,076	2,345	60	31	62,229
1935 ..	24,547	18,456	8,851	5,163	4,118	2,353	70	41	63,599
1936 ..	24,376	18,778	8,593	5,464	4,230	2,387	60	44	63,932

(a) Part of New South Wales prior to 1911.

2. Crude Death Rates.—The crude death rates at intervals from 1901 to 1936 are shown in the following table :—

CRUDE DEATH RATES.(a)

Year and Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Aus- tralia.
1901 ..	11.75	13.22	11.98	11.12	13.39	10.51	19.10	(b)	12.22
1911 ..	10.31	11.52	10.65	9.81	10.19	10.14	19.63	5.61	10.66
1921 ..	9.59	10.52	9.37	10.02	10.42	10.30	20.44	1.61	9.91
1924 ..	9.28	10.05	9.00	9.25	8.99	9.82	11.84	3.83	9.46
1925 ..	9.07	9.47	9.02	9.22	8.89	9.26	16.19	2.50	9.19
1926 ..	9.44	9.63	9.58	8.81	8.79	8.94	16.22	6.60	9.40
1927 ..	9.46	9.71	9.28	9.07	8.65	9.54	17.07	6.96	9.42
1928 ..	9.21	10.11	9.01	9.02	8.93	9.80	15.02	5.73	9.42
1929 ..	9.82	9.44	9.26	8.80	9.34	9.99	14.55	4.57	9.52
1930 ..	8.39	8.93	8.19	8.46	8.80	8.82	15.46	3.57	8.56
1931 ..	8.32	9.47	8.14	8.49	8.51	9.15	14.12	4.09	8.67
1932 ..	8.27	9.29	8.35	8.58	8.54	8.90	14.85	3.25	8.63
1933 ..	8.58	9.59	8.84	8.44	8.64	9.60	12.55	4.20	8.92
1934 ..	8.95	10.19	8.57	9.26	9.23	10.23	12.16	3.35	9.32
1935 ..	9.28	10.03	9.16	8.83	9.25	10.25	13.72	4.37	9.46
1936—									
Male ..	10.10	10.94	9.89	10.07	10.96	11.27	14.29	5.10	10.38
Female ..	8.16	9.40	7.57	8.53	7.64	9.38	5.34	3.80	8.40
Total ..	9.14	10.16	8.78	9.30	9.40	10.34	11.42	4.51	9.43

(a) Number of deaths per 1,000 of annual mean population. (b) Part of New South Wales prior to 1911

3. *Index of Mortality.*—(i) *General.* The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking the age constitution into consideration. Other conditions being equal, however, the death rate of a country will be low if it contains a large percentage of young people (not infants). In order to obtain a comparison of the mortality of various countries on a uniform basis so far as sex and age constitution are concerned, the standard population compiled by the International Institute of Statistics according to age distribution (eleven age-groups) of the population of nineteen European countries at their censuses nearest to the year 1900 is used in the computation of the "Index of Mortality" as distinguished from the crude death rate. Full details of the "Standard Population" will be found in Year Book No. 22, page 962.

(ii) *Comparison of Rates.* For the year 1936 on the basis of the crude rates there is a range of 1.56 per 1,000 persons between the lowest rate in Queensland (8.78) and the highest rate in Tasmania (10.34). On the standardized rates the range was 1.26 per 1,000, i.e., between 8.36 in South Australia and 9.62 in Western Australia. In its application to the figures for 1936 the process of adjustment altered mainly the relative positions of the middle States, particularly that of Western Australia, from those determined by the crude rates. Thus Western Australia which was third highest in the crude rates became first while South Australia, which was fourth, had on the standardized basis the lowest rate of all the States. The index of mortality for each State for 1921, 1931, 1935 and 1936 is shown in the following table:—

INDEX OF MORTALITY.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Aus- tralia.
1921	10.35	10.79	10.24	10.38	11.88	10.83	13.71	1.89	10.58
1931	8.41	8.78	8.36	7.85	8.66	8.58	10.37	5.27	8.49
1935	9.18	9.08	9.39	7.97	9.47	9.54	10.91	6.60	9.10
1936	9.12	9.23	9.02	8.30	9.62	9.00	8.52	6.57	9.12

(a) See letter-press below.

In view of the changing age constitution of the population, comparisons by means of the indexes of mortality published for years other than the Census and immediately adjoining years need to be made with caution. For the purpose of computing the indexes for each State and the Commonwealth, the ages of the people are estimated for each year on the basis of the proportions ascertained at the previous Census, and hence the results obtained represent the position as it would be had the age constitution remained constant since the Census. Actually considerable variations in ages have occurred during recent years which make this assumption misleading, but owing to lack of data it is impracticable to measure the effects in the States individually. For the Commonwealth as a whole, however, the changes in the ages of the population since the Census of 1933 have been measured from year to year from the records of migration and deaths in separate age groups and of births in each successive year, and on re-calculating the indexes of mortality for the Commonwealth for each year since the Census on the basis of the new age composition so ascertained the more reliable results of 8.02 for 1934, 8.83 for 1935 and 8.70 for 1936 are obtained. These rates are considerably lower than the indexes previously calculated, the difference being due to the ageing of the Australian population. Unfortunately, it is not possible to indicate with accuracy the corresponding variations in the indexes for individual States.

4. **Crude Death Rates of Various Countries.**—The following table gives the crude death rates of various countries for a pre-war period and the latest available year:—

CRUDE DEATH RATES.(a)—VARIOUS COUNTRIES.

Country.	1908-13.	1935.	Country.	1908-13.	1935.
New Zealand ..	9.3	8.2	Great Britain and		
Netherlands ..	13.9	8.7	Ireland ..	14.5	12.0
South Australia ..	10.1	8.8	Finland ..	16.4	12.0
Western Australia ..	10.3	9.2	Switzerland ..	15.2	12.1
Queensland ..	10.3	9.2	Belgium ..	15.7	12.8
New South Wales ..	10.3	9.3	Argentine Republic ..	17.5	13.0
Australia ..	10.7	9.5	Scotland ..	15.5	13.2
Canada (including			Czechoslovakia ..	21.0	13.4
Quebec) ..	(c)	9.6	Irish Free State ..	16.9	13.7
Victoria ..	11.7	10.0	Italy ..	20.4	13.9
Norway ..	13.6	10.2	Poland ..	21.0	13.9
Tasmania ..	10.7	10.2	Northern Ireland ..	16.9	14.4
Union of South Africa			Spain ..	22.8	15.3
(Whites) ..	(c)	10.5	France ..	18.6	15.7
United States (b) ..	(c)	10.9	Japan ..	20.5	16.8
Denmark ..	13.2	11.2	Soviet Union ..	28.9	18.8(d)
Sweden ..	14.0	11.7	Rumania ..	24.7	21.1
England and Wales ..	14.1	11.7	Egypt ..	25.8	26.7
Germany ..	16.5*	11.8	Ceylon ..	31.4	36.6

(a) Number of deaths per 1,000 of mean population.
available. (d) For year 1928.

(b) Registration area.

(c) Not

5. **Infantile Deaths and Death Rates.**—(i) *Australia, 1901 to 1936.* The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 280,269 male infants born from 1932 to 1936, 13,023 (45.49 per 1,000) died during their first year of life, while of 272,806 female infants only 9,934 (36.41 per 1,000) died during the first year.

INFANTILE DEATHS AND DEATH RATES.—AUSTRALIA.

Year.	Registered deaths under one year.			Rate of Infantile Mortality. (a)		
	Males.	Females.	Total.	Males.	Females.	Total.
1901 ..	5,888	4,778	10,666	112.13	94.73	103.61
1911 ..	4,745	3,624	8,369	75.91	60.72	68.49
1921 ..	5,111	3,841	8,952	72.97	58.06	65.73
1931 ..	2,889	2,105	4,994	47.34	36.62	42.14
1933 ..	2,500	1,897	4,397	43.74	35.06	39.52
1934 ..	2,697	2,075	4,772	48.29	38.69	43.59
1935 ..	2,537	1,892	4,429	44.59	34.76	39.78
1936 ..	2,668	2,110	4,778	44.92	37.23	41.10

(a) Number of deaths under 1 year per 1,000 live births registered.

(ii) *States, 1901 to 1936.* For the States and Territories the rates of infantile mortality during the period 1901-36 were as follows:—

INFANTILE MORTALITY RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	F.C.T.	Australia
1901-05..	97.02	95.91	94.35	86.60	124.79	90.00	149.35	(c)	96.91
1906-10..	77.30	79.90	71.27	68.38	89.80	83.18	143.79	(c)	77.61
1911-15..	71.05	72.23	65.68	67.26	72.43	70.91	85.11	32.56	70.32
1916-20..	64.82	67.18	63.04	61.93	61.73	63.84	67.15	40.40	64.67
1921-25..	58.11	61.93	50.99	54.19	59.14	60.44	40.82	60.24	57.88
1926-30..	54.74	52.34	47.41	46.95	49.27	53.37	66.09	71.31	51.99
1931-35..	41.92	42.74	39.19	35.13	40.79	44.17	81.08	31.54	41.27
1932 ..	40.98	43.00	40.19	36.62	44.57	41.19	75.95	19.876	41.30
1933 ..	39.35	40.43	42.74	32.13	36.83	41.07	94.59	45.806	39.52
1934 ..	46.36	44.63	40.61	35.58	40.89	42.28	68.18	7.466	43.59
1935 ..	39.44	41.17	37.26	34.95	40.15	51.84	83.33	47.306	39.78
1936 ..	43.47	42.31	36.20	31.09	42.22	49.55	26.55	25.326	41.16

(a) Number of deaths under 1 year per 1,000 live births registered. (b) Based on deaths of infants born in the Federal Capital Territory. (c) Part of New South Wales prior to 1911.

INFANTILE MORTALITY RATES—UNDER ONE MONTH AND UNDER ONE YEAR.

State.	Under one month.				One month and under one year.			
	1911-15.	1921-25.	1931-35.	1936.	1911-15.	1921-25.	1931-35.	1936.
New South Wales ..	31.75	29.97	27.64	29.51	39.30	28.14	14.28	13.96
Victoria ..	33.07	32.19	27.76	26.56	39.16	29.74	14.98	15.75
Queensland ..	30.73	27.44	28.02	26.34	34.95	23.55	11.47	9.86
South Australia ..	29.07	27.83	23.00	20.99	38.19	26.36	12.13	10.10
Western Australia..	30.87	27.56	25.11	25.47	41.56	31.58	15.68	16.75
Tasmania ..	32.68	31.73	30.07	34.27	38.23	28.71	14.40	15.28
Australia ..	31.69	29.91	27.28	27.47	38.63	27.97	13.99	13.69

These tables disclose the striking decrease in infantile mortality, the rate for 1936 being much less than half that of 1901-05. The second table reveals the fact that relatively little improvement has taken place in the first month of life, but that the principal decrease has occurred among the older children and has been due to the decline in preventable diseases.

The deaths of infants under one year of age during 1936 numbered 4,778, the mortality rate being 41.10. Among the States, South Australia had the lowest and Tasmania the highest rate.

(iii) *Districts.* The total numbers of births and of deaths of children under one year of age for 1936 are shown in Australian Demography Bulletin, No. 54, for each of the sixty-four districts for which vital statistics have been tabulated.

(iv) *Various Countries and Cities.* Compared with other countries the States of Australia occupy a very favourable position, being surpassed only by New Zealand, although in 1935, the latest year for which satisfactory figures are available, an exceptionally high rate of infant mortality in Tasmania placed this State below the Netherlands, Sweden, Norway and Switzerland. The Australian cities, Adelaide, Sydney and Perth, are among the cities having the ten lowest rates in the list shown on the next page. The list is headed by Oslo (27), Amsterdam (28), and Wellington (33), the next seven cities being San Francisco, Adelaide, Sydney, Christchurch, Stockholm, Chicago and Perth. The highest rate recorded in 1935 of the cities named in the table

was 245 in Bombay. A study of the respective rates shows that a high birth rate is often though not invariably accompanied by a high infantile death rate :—

INFANTILE MORTALITY RATES.(a)—VARIOUS COUNTRIES.

Country.	Infantile Mortality Rate (a)		Crude Birth Rate, (b) 1935.	Country.	Infantile Mortality Rate.(a)		Crude Birth Rate, (b) 1935.
	1906-15.	1935.			1906-15.	1935.	
New Zealand ..	61	32	16.1	Irish Free State..	92	67	19.2
South Australia ..	68	35	14.1	Germany ..	168	68	18.9
Queensland ..	68	37	18.3	France ..	122	69	15.2
New South Wales	74	39	16.9	Denmark ..	103	71	17.7
Western Australia	81	40	18.2	Canada (includ-			
Netherlands ..	115	40	20.2	ing Quebec) ..	(c)	71	20.2
Australia ..	74	40	16.6	Scotland ..	113	77	17.8
Victoria ..	76	41	15.2	Belgium ..	139	85	15.4
Norway ..	68	41	14.6	Northern Ireland	92	86	19.2
Sweden ..	74	47	13.8	Italy ..	144	101	23.3
Switzerland ..	108	48	16.0	Japan ..	151	107	31.6
Tasmania ..	77	52	19.4	Spain ..	156	110	25.7
United States (Re-				Czechoslovakia ..	(c)	123	17.9
gistration Area)	(c)	56	16.9	Hungary ..	205	154	20.8
England and				Egypt ..	(c)	161	41.9
Wales ..	113	57	14.7	Soviet Union ..	(c)	173(d)	42.7(e)
Great Britain and				Rumania ..	(c)	192	30.7
Ireland ..		60	15.2	Ceylon..	(c)	263	34.4
Union of South							
Africa (Whites)	(c)	63	24.2				

(a) Number of deaths under 1 year per 1,000 births registered.
mean population

(c) Not available.

(d) For year 1930.

(b) Number of births per 1,000 o
(e) For year 1932.

INFANTILE MORTALITY RATES.(a)—VARIOUS CITIES.

City.	Rate of Infantile Mortality.(a)		City.	Rate of Infantile Mortality.(a)	
	1921.	1935.		1921.	1935.
Oslo ..	54	27	Copenhagen ..	67	56
Amsterdam ..	54	28	Washington ..	83	60
Wellington ..	61	33	Breslau ..	170	62
San Francisco ..	50	35	Munich ..	126	63
Adelaide ..	74	35	Berlin ..	135	63
Sydney ..	62	36	Leeds ..	98	64
Christchurch ..	54	38	Birmingham ..	82	65
Stockholm ..	61	38	Leipzig ..	136	66
Chicago ..	84	40	Paris ..	95	67
Perth ..	81	40	Cologne ..	140	67
Auckland ..	54	41	Edinburgh ..	96	70
Brisbane ..	62	43	Manchester ..	94	71
Melbourne ..	74	43	Hobart ..	75	72
Detroit ..	83	44	Liverpool ..	105	84
New York City ..	72	48	Johannesburg ..	101	89
Philadelphia ..	78	48	Aberdeen ..	108	91
Dresden ..	115	50	Montreal ..	158	92
Toronto ..	91	50	Dublin ..	123	93
Los Angeles ..	68	51	Madrid ..	..	98
London ..	80	51	Glasgow ..	106	98
Hamburg ..	95	51	Belfast ..	115	112
Sheffield ..	99	52	Cairo ..	..	191
Cape Town ..	82	55	Madras ..	281	224
Antwerp ..	98	56	Bombay ..	402	245

(a) Number of deaths under 1 year per 1,000 births registered.

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.—AUSTRALIA, 1936.

Age at Death.	Measles.	Whooping Cough.	Diphtheria.	Erysipelas.	Meningococcal Meningitis.	Respiratory Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphilis.	Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week ..	..	..	..	..	..	..	1	..	5	..	15	..
1 week and under 2 weeks ..	..	1	..	..	1	1	..	..	2	..	3	1
2 weeks " 3 "	..	3	..	2	..	..	..	..	..	..	..	2
3 " " 1 month ..	..	3	..	..	..	..	..	..	..	..	3	1
1 month " 2 months ..	..	24	2	1	..	..	..	..	3	..	3	..
2 months " 3 "	..	27	5	2	1	..	..	1	3	..	3	7
3 " " 4 "	1	17	1	2	..	..	1	..	1	..	..	..
4 " " 5 "	1	18	2	1	..	..	1	..	1	..	..	..
5 " " 6 "	..	11	2	..	..	..	3	..	1	..	4	..
6 " " 7 "	..	12	2	..	..	2	..	..	2	..	1	..
7 " " 8 "	..	10	2	..	..	1	2	2	1	..	..	..
8 " " 9 "	1	4	2	1	2	..	..	..	1	..	..	3
9 " " 10 "	1	4	3	3	..	..	1	..	..	1	1	..
10 " " 11 "	..	16	4	1	1	1	1	..	..	2	..	..
11 " " 1 year ..	..	10	7	..	..	1	2	..	..	2	..	..
Total under 1 year ..	4	160	32	13	5	6	14	3	20	32	32	17
Infantile Mortality (a)—												
1911 ..	0.34	1.57	0.25	0.16	..	0.08	0.31	0.22	0.85	1.83	2.55	2.34
1921 ..	0.15	1.97	0.59	0.24	0.03	0.07	0.18	0.08	0.56	1.10	1.45	1.50
1931 ..	0.10	1.58	0.25	0.11	0.08	0.03	0.22	0.04	0.20	0.32	0.39	0.32
1936 ..	0.03	1.38	0.28	0.11	0.04	0.05	0.12	0.03	0.17	0.28	0.28	0.15
Ex-nuptial deaths under 1 year included in above	3	5	5	..	..	..	..	1	4	..	2	..
Infantile Mortality (b)—												
1925 ..	0.16	2.06	0.32	0.16	0.48	..	0.32	..	1.27	0.32	2.38	0.48
1931 ..	0.51	1.71	0.34	..	0.17	..	0.34	..	0.51	..	0.51	0.86
1936 ..	0.59	0.97	0.97	..	..	..	..	0.20	0.78	..	0.39	..
Age at Death.	Broncho-Pneumonia.	Pneumonia.	Other Diseases of Stomach.	Diarrhea and Enteritis.	Hernia and Intestinal Obstruction.	Malformation.	Congenital Debility. (c)	Premature Birth.	Injury at Birth.	Icterus, Sclerema and other Diseases of Early Infancy.	Other Causes.	Total.
Under 1 week ..	24	12	..	3	1	284	165	1,302	352	361	57	2,582
1 week and under 2 weeks ..	27	4	..	3	3	41	20	110	40	46	27	330
2 weeks " 3 "	14	9	..	8	2	25	11	35	12	15	10	157
3 " " 1 month ..	18	6	..	6	2	19	7	23	5	8	18	119
1 month " 2 mths ..	55	20	..	16	1	53	17	15	3	11	41	277
2 months " 3 "	36	21	1	17	4	25	16	11	..	..	36	210
3 " " 4 "	22	9	..	21	2	23	10	3	..	2	21	141
4 " " 5 "	21	15	1	20	5	8	10	..	..	..	25	134
5 " " 6 "	23	9	2	32	4	7	5	2	..	..	16	121
6 " " 7 "	19	18	..	27	5	7	6	..	..	1	29	138
7 " " 8 "	29	10	1	21	10	8	3	1	..	..	21	128
8 " " 9 "	32	10	..	20	5	2	3	..	..	1	23	110
9 " " 10 "	18	16	..	18	5	8	4	..	..	..	28	112
10 " " 11 "	22	16	..	22	2	4	..	..	..	..	27	119
11 " " 1 year ..	18	12	3	14	3	3	4	..	..	..	21	100
Total under 1 year ..	378	187	8	248	54	517	281	1,502	412	447	406	4,778
Infantile Mortality (a)												
1911 ..	2.86	1.90	0.47	16.99	0.72	2.99	..	22.41	4.07	5.58	68.49	
1921 ..	3.08	2.08	0.71	15.01	0.57	3.74	7.64	15.29	5.53	4.16	65.73	
1931 ..	2.82	1.62	0.13	3.26	0.41	4.23	2.60	14.04	2.81	3.29	3.29	42.14
1936 ..	3.25	1.61	0.07	2.14	0.46	4.45	2.42	12.94	3.55	3.85	3.50	41.16
Ex-nuptial deaths under 1 year included in above	36	13	1	32	1	17	22	111	14	28	45	340
Infantile Mortality (b)—												
1925 ..	8.09	2.38	1.11	10.18	0.47	3.64	9.51	20.93	1.90	2.69	6.93	84.83
1931 ..	5.31	3.43	0.14	8.30	0.17	4.28	7.19	21.92	3.08	3.77	5.82	68.65
1936 ..	7.02	2.54	0.20	6.24	0.20	3.32	4.20	21.65	2.73	5.46	8.78	66.33

(a) Rate per 1,000 total births. (b) Rate per 1,000 ex-nuptial births. (c) Including Icterus and Sclerema prior to 1931.

(v) *Causes of Deaths of Children under one Year.* The preceding table gives for twenty-three causes the ages of all children who died under one year of age during 1936. The infantile mortality rates for 1911, 1921, 1931 and 1936 have been added for all births, and for 1925, 1931 and 1936 for ex-nuptial births. Particulars for males and females may be found in Australian Demography Bulletin, No. 54.

Pre-natal influences, such as malformation, congenital debility and premature birth, together with injuries at birth, accounted for 3,159 or 66 per cent. of all deaths under one year; and of these 3,159 deaths, 2,464 or 78 per cent., occurred less than a week after birth. Among the survivors of the first week, broncho-pneumonia caused the greatest number of deaths. This disease was responsible for 378 deaths, representing 8 per cent. of all deaths under one year, or 3.25 per 1,000 births. Diarrhoea and enteritis caused 248 deaths and whooping cough 160 deaths.

(vi) *Deaths of Ex-nuptial Children under one Year.* The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children in 1936 and the rates in respect of 1925, 1931 and 1936 are shown as an addendum to the preceding table

Pre-natal influences such as malformation, congenital debility, premature birth and injuries at birth accounted for 192, or 56 per cent., and broncho-pneumonia for 36, or 10 per cent., of the total deaths of ex-nuptial children under 1 year.

6. *Deaths in Age-Groups.*—A distribution into age-groups has been made of the 305,634 deaths which occurred in Australia during the past five years, and the results are shown in the following table.

A table giving the corresponding percentages for earlier periods from the year 1901 has been added to show the movement over a longer term. The most striking change is the substantial decrease in the group "under 1 year". At the other end of the table, the group "65 years and over" has increased by a similar amount. The percentages in all age-groups under 40 have fallen and those in all age-groups from 40 onwards have risen. These changes are partly due to improvement in the efficiency of medical science and partly to changes in the age distribution of the population. The latter changes are themselves in part due to increased length of life made possible by medical science and in part to changes in the volume of migration and the falling birth-rate :—

DEATHS IN AGE-GROUPS.—AUSTRALIA, 1932 TO 1936.

Age-Group.	Males.	Females.	Total.	Percentage on Total Males.	Percentage on Total Females.	Percentage on Total.
				%	%	%
Under 1 year ..	13,023	9,934	22,957	7.61	7.38	7.51
1 year and under 5 ..	4,630	3,926	8,556	2.71	2.92	2.80
5 years and under 20 ..	7,276	5,249	12,525	4.25	3.90	4.10
20 years and under 40 ..	15,440	14,530	29,970	9.03	10.79	9.81
40 years and under 60 ..	37,244	26,094	63,338	21.78	19.38	20.72
60 years and under 65 ..	15,376	10,241	25,617	8.99	7.61	8.38
65 years and over ..	77,928	64,620	142,548	45.57	48.01	46.64
Age unspecified ..	106	17	123	0.06	0.01	0.04
Total ..	171,023	134,611	305,634	100.00	100.00	100.00

DEATHS IN AGE-GROUPS—PERCENTAGES.—AUSTRALIA.

Age-Group. (Years.)	Males.			Females.			Persons.		
	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.
	%	%	%	%	%	%	%	%	%
Under 1 ..	19.80	15.16	13.18	21.47	15.27	12.98	20.51	15.20	13.10
1-4 ..	5.84	5.61	4.35	7.28	6.58	4.72	6.45	6.03	4.51
5-19 ..	5.84	5.18	4.86	7.08	5.73	4.85	6.37	5.42	4.85
20-39 ..	13.85	13.57	11.00	16.54	16.34	13.59	14.99	14.76	12.12
40-59 ..	19.70	22.55	21.76	15.67	18.41	18.96	17.99	20.77	20.55
60-64 ..	5.71	7.58	9.01	4.77	5.86	7.27	5.31	6.84	8.26
65 and over ..	29.08	30.18	35.71	27.15	31.77	37.61	28.26	30.86	36.53
Age Unspecified	0.18	0.17	0.13	0.04	0.04	0.02	0.12	0.12	0.08
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

7. Deaths at Single Ages and in Age-Groups.—(i) *General.* The 63,932 deaths registered in Australia in the year 1936 will be found tabulated in groups of five years for each State and Territory in the latest Australian Demography Bulletin. The deaths during the first fifteen years of life have been tabulated in single ages and for the first year of life in shorter periods. A summary for Australia is given in the following table:—

DEATHS AT SINGLE AGES AND IN AGE-GROUPS.—AUSTRALIA, 1936.

Ages.	Males.	Fe- males.	Total.	Ages.	Males.	Fe- males.	Total.
Under 1 week ..	1,103	1,119	2,582	Total 5-9 years ..	478	315	823
1 week and under 2 ..	190	140	330	" 10-14 " ..	418	277	695
2 weeks and under 3 ..	83	74	157	" 15-19 " ..	602	407	1,009
3 weeks and under 1 month ..	67	52	119				
Total under 1 month ..	1,803	1,385	3,188	" 20-24 " ..	725	603	1,328
				" 25-29 " ..	758	759	1,517
1 month and under 3 ..	274	213	487	" 30-34 " ..	712	741	1,453
2 months and under 6 ..	217	170	390	" 35-39 " ..	918	893	1,811
3 months and under 12 ..	374	333	707	" 40-44 " ..	1,192	1,006	2,198
Total under 1 year ..	2,668	2,110	4,778	" 45-49 " ..	1,791	1,286	3,077
				" 50-54 " ..	2,215	1,455	3,700
1 year and under 2 ..	388	333	721	" 55-59 " ..	2,030	1,075	4,305
2 years ..	200	109	309	" 60-64 " ..	3,081	2,221	5,302
3 " ..	152	114	266	" 65-69 " ..	3,027	2,825	6,752
4 " ..	114	126	240	" 70-74 " ..	4,405	3,317	7,722
				" 75-79 " ..	4,018	3,125	7,143
Total under 5 years ..	3,522	2,852	6,374	" 80-84 " ..	2,514	2,330	4,853
				" 85-89 " ..	1,130	1,203	2,420
				" 90-94 " ..	360	511	871
				" 95-99 " ..	89	132	221
				" 100 and over	14	10	33
				Age Unspecified	13	1	14
				Total All Ages ..	35,651	28,281	63,932

(ii) *Rates.*—The following table gives the average annual death rates per 1,000 living in age-groups for the period 1932 to 1934, i.e., the Census year 1933 and the years immediately preceding and following. Deaths in the Northern Territory and the Federal Capital Territory are included in the total for Australia but not in any of the States. Similar details for the years 1920 to 1922 may be found in Official Year Book, No. 22, p. 975.

AVERAGE ANNUAL DEATH RATES.—AGE GROUPS, 1932 TO 1934.

Age Group.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
MALES.							
Years.							
0-4 ..	12.51	12.65	12.21	9.91	12.81	12.77	12.33
5-9 ..	1.41	1.72	1.56	1.21	1.56	2.08	1.53
10-14 ..	1.23	1.38	1.08	1.04	1.40	1.27	1.24
15-19 ..	1.69	1.76	1.93	1.71	1.76	2.05	1.76
20-24 ..	2.28	2.31	2.81	2.31	2.52	2.73	2.41
25-29 ..	2.21	2.58	2.93	2.50	2.85	2.98	2.52
30-34 ..	2.81	2.82	3.50	2.53	3.10	3.78	2.96
35-39 ..	3.76	3.85	4.61	3.26	4.01	4.71	3.92
40-44 ..	5.34	4.93	6.04	4.71	5.69	4.85	5.28
45-49 ..	7.91	7.61	7.98	6.80	8.81	6.90	7.76
50-54 ..	11.62	11.25	14.82	9.81	13.48	9.96	11.45
55-59 ..	17.70	18.68	17.58	15.15	21.43	14.47	17.89
60-64 ..	25.74	26.66	26.92	25.08	28.26	23.92	26.27
65-69 ..	39.99	41.17	39.94	36.14	42.40	35.11	40.03
70-74 ..	62.28	63.96	58.90	57.29	63.40	59.22	61.85
75-79 ..	95.52	98.12	94.59	92.66	105.14	94.23	96.26
80-84 ..	156.44	157.81	168.61	146.83	176.82	160.80	158.70
85-89 ..	231.04	233.33	218.42	239.45	264.96	204.45	230.75
90 and over	313.38	348.76	314.86	303.07	380.77	401.97	327.55
FEMALES.							
Years.							
0-4 ..	10.05	7.04	10.72	8.30	8.64	10.42	10.00
5-9 ..	1.17	1.30	1.03	1.03	1.27	1.54	1.19
10-14 ..	0.83	0.97	0.93	0.90	0.99	0.91	0.90
15-19 ..	1.36	1.39	1.50	1.23	1.26	2.22	1.39
20-24 ..	2.03	2.00	2.77	2.35	1.94	2.58	2.11
25-29 ..	2.44	2.50	2.81	2.74	2.75	3.74	2.60
30-34 ..	2.88	2.87	3.44	2.64	3.13	3.63	2.97
35-39 ..	3.75	3.37	4.05	3.88	4.24	4.43	3.74
40-44 ..	4.24	4.32	4.89	4.10	5.79	4.88	4.37
45-49 ..	6.02	6.11	6.14	5.78	6.35	5.44	6.03
50-54 ..	8.27	8.81	8.61	8.07	9.08	10.08	8.56
55-59 ..	11.62	12.49	12.02	11.26	10.69	11.62	15.54
60-64 ..	17.27	18.73	17.19	17.78	17.32	16.87	17.77
65-69 ..	29.55	29.91	27.01	27.13	29.81	30.40	29.21
70-74 ..	45.95	48.18	49.03	42.31	44.10	48.31	40.70
75-79 ..	74.78	81.13	76.29	75.65	74.42	83.58	77.47
80-84 ..	125.55	127.91	126.63	120.74	120.99	125.15	125.68
85-89 ..	119.40	204.57	208.19	207.40	192.39	195.28	199.94
90 and over	292.10	327.19	370.23	233.58	397.20	363.63	306.24
PERSONS.							
Years.							
0-4 ..	11.31	11.37	11.48	9.12	11.35	11.62	11.19
5-9 ..	1.29	1.51	1.30	1.12	1.41	1.81	1.36
10-14 ..	1.03	1.18	1.01	0.97	1.20	1.09	1.07
15-19 ..	1.52	1.57	1.72	1.47	1.51	2.14	1.58
20-24 ..	2.16	2.16	2.60	2.35	2.24	2.66	2.26
25-29 ..	2.32	2.54	2.87	2.61	2.80	3.35	2.56
30-34 ..	2.85	2.85	3.47	2.59	3.12	3.71	2.96
35-39 ..	3.76	3.61	4.34	3.57	4.12	4.56	3.83
40-44 ..	4.79	4.62	5.50	4.40	5.15	4.86	4.83
45-49 ..	6.99	6.84	7.14	6.29	7.67	6.19	6.92
50-54 ..	10.00	10.00	10.37	8.93	11.47	10.02	10.04
55-59 ..	14.70	15.46	14.86	13.19	16.63	13.09	14.88
60-64 ..	21.56	22.46	22.41	21.35	23.44	20.52	22.04
65-69 ..	34.90	35.29	34.06	31.39	37.01	32.87	34.69
70-74 ..	54.31	55.68	54.55	49.43	55.28	53.89	54.38
75-79 ..	85.18	89.06	86.33	83.92	91.08	88.97	86.82
80-84 ..	140.43	140.48	148.56	132.56	149.72	142.64	141.13
85-89 ..	209.89	215.56	213.10	220.66	222.90	199.07	214.17
90 and over	301.13	334.60	341.25	253.61	389.21	376.36	314.41

8. Deaths of Centenarians.—Particulars concerning the thirty-three persons—fourteen males and nineteen females—who died in 1936 aged 100 years and upwards, are given in the following table. While the Registrars-General of the various States verify the figures as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages. In connexion with this question it may be noted that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loopholes for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS.—AUSTRALIA, 1936.

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Australia.	Conjugal Condition.
MALES.							
100	North Sydney	N.S.W. ..	Senility ..	Gold Miner	Scotland ..	60 years ..	Single
100	Murwillumbah	" ..	Senile Myocarditis	Farmer ..	Ireland ..	76 years ..	"
100	Paddington	" ..	Myocarditis	Contractor	" ..	74 years ..	Married
100	Wellington	" ..	Arterio-Sclerosis	Station Manager	England ..	99 years ..	"
101	Port Adelaide	Sth. Aust.	Broncho-Pneumonia	Fisherman	Greece ..	75 years ..	"
102	Albury ..	N.S.W. ..	Chronic Myocarditis	Hawker ..	India ..	47 years ..	"
102	Ipswich ..	Queensland	Hypertrophy of Prostate	Farmer ..	Germany ..	71 years ..	"
104	Nedlands ..	West. Aust.	Senility ..	Shoemaker	England ..	77 years ..	"
104	Fitzroy ..	Victoria ..	Carcinoma of Colon	Hawker ..	India ..	50 years ..	Single
104	Braidwood	N.S.W. ..	Senility ..	Not Stated	Ireland ..	80 years ..	Married
105	Narromine	" ..	" ..	Labourer ..	N.S.W. ..	Native ..	Single
105	Granville ..	" ..	" ..	Miner ..	China ..	30 years ..	"
107	Tatlarra ..	Sth. Aust.	Senile Myocarditis	Pensioner	England ..	82 years ..	Married
110	Cobar ..	N.S.W. ..	Ulcer of Face	Not Stated	Not Stated	Not Stated	Not Stated
FEMALES.							
100	Oatlands ..	Tasmania	Sarcoma of Leg	" ..	England ..	97 years ..	Married
100	Fremantle ..	West. Aust.	Cardio-Vascular Degeneration	" ..	Ireland ..	70 years ..	"
100	Payneham	Sth. Aust.	Cerebral Haemorrhage	" ..	England ..	96 years ..	"
100	Rockhampton	Queensland	Pneumonia ..	" ..	South Sea Islands	Not Stated	Not Stated
100	St. Peters ..	Sth. Aust.	Hypostatic Pneumonia	" ..	Scotland ..	72 years ..	Married
100	Essendon ..	Victoria ..	Cardio-Vascular Degeneration	" ..	England ..	81 years ..	"
100	Dandenong	" ..	Hypostatic Pneumonia	" ..	Tasmania	Native ..	Single
100	Marrickville	N.S.W. ..	Senility ..	" ..	England ..	77 years ..	Married
100	Marrickville	" ..	" ..	" ..	Ireland ..	80 years ..	Single
101	Unley ..	Sth. Aust.	Rodent Ulcer of Face	" ..	England ..	86 years ..	Married
101	Riverton ..	" ..	Senility ..	" ..	Germany ..	80 years ..	"
102	St. Peters ..	" ..	" ..	" ..	Ireland ..	84 years ..	"
102	Ballarat ..	Victoria ..	Myocardial Degeneration	" ..	England ..	81 years ..	"
102	Marrickville	N.S.W. ..	Senility ..	" ..	Tasmania	Native ..	Single
103	Launceston	Tasmania	" ..	" ..	Ireland ..	80 years ..	"
103	Kalgoorlie ..	West. Aust.	Myocarditis	" ..	" ..	100 years ..	"
103	Toowoomba	Queensland	Senility ..	" ..	France ..	40 years ..	Not Stated
104	Mitcham ..	Sth. Aust.	" ..	" ..	Ireland ..	30 years ..	Married
104	Melbourne ..	Victoria ..	" ..	" ..	Scotland ..	80 years ..	"
					Ireland ..	80 years ..	"

NOTE.—The particulars shown in this table are those given in the death certificates, and no attempt has been made by the Commonwealth Bureau of Census and Statistics to verify them.

9. Length of Residence in Australia of Persons who Died. The length of residence in Australia of all persons whose deaths were registered in the year 1936 is shown in the following table:—

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1936.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in Australia ..	25,202	21,612	46,814	Resident 25 to 29 years	745	365	1,110
Resident under 1 year	36	13	49	" 30 to 34 " ..	427	138	565
" 1 year ..	17	12	29	" 35 to 39 " ..	309	132	441
" 2 years ..	14	13	27	" 40 to 44 " ..	551	275	826
" 3 " ..	21	7	28	" 45 to 49 " ..	762	493	1,255
" 4 " ..	13	6	19	" 50 to 54 " ..	1,064	1,060	2,724
" 5 " ..	24	10	34	" 55 to 59 " ..	706	463	1,169
" 6 " ..	24	21	45	" 60 to 64 " ..	715	454	1,169
" 7 " ..	40	34	74	" 65 yrs. and over	1,121	1,396	2,517
" 8 " ..	90	54	144	Length of residence not stated ..	1,561	518	2,079
" 9 " ..	89	68	157				
" 10 to 14 years	481	335	816				
" 15 to 19 "	242	256	498				
" 20 to 24 "	797	546	1,343	Total ..	35,651	28,281	63,932

10. Birthplaces of Persons who Died.—The following table provides a summary of birthplaces of persons whose deaths were registered in 1911 and 1936. More detailed information in respect of 1936 will be found in Australian Demography Bulletin. No. 54:—

BIRTHPLACES OF PERSONS WHO DIED.—AUSTRALIA.

Birthplace.	1911.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
AUSTRALASIA—						
Australia ..	14,476	12,279	26,755	25,202	21,612	46,814
New Zealand ..	126	79	205	328	199	527
EUROPE—						
England and Wales ..	5,639	3,541	9,180	5,160	3,449	8,609
Scotland ..	1,666	1,112	2,778	1,306	925	2,231
Ireland ..	2,837	2,528	5,365	1,389	1,290	2,679
Other British Possessions	40	26	66	54	14	68
Western Europe ..	365	62	427	342	95	437
Central Europe ..	678	292	970	399	236	635
Southern Europe ..	122	15	137	229	57	286
Eastern Europe ..	71	6	77	88	24	112
ASIA—						
British Possessions ..	102	28	130	133	42	175
Foreign Countries ..	470	8	478	231	20	251
AFRICA—						
British Possessions ..	29	18	47	27	29	56
Foreign Countries ..	2	1	3	7	1	8
AMERICA—						
Canada ..	73	15	88	50	13	63
Other British Possessions	5	6	11	13	8	21
United States of America	72	18	90	71	42	113
Other Foreign Countries	35	12	47	13	3	16
POLYNESIA—						
British ..	47	4	51	15	9	24
Foreign ..	44	10	54	35	11	46
Indefinite ..	692	218	910	559	202	761
Total ..	27,591	20,278	47,869	35,651	28,281	63,932

11. *Occupations of Males who Died.*—Information as to the main groups of the occupations of the 35,651 males who died in Australia in 1936 is contained in the following table. Corresponding data for 1921 and 1931 have been added for purposes of comparison.

OCCUPATIONS OF MALES WHO DIED.—AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1936.	1921.	1931.	1936.
				%	%	%
Professional	1,307	1,534	1,949	4.26	4.82	5.47
Domestic	830	846	833	2.71	2.66	2.34
Commercial	2,739	3,727	3,089	8.94	11.72	8.66
Transport and Communica- tion	1,841	2,189	2,605	6.01	6.89	7.31
Industrial	8,613	10,330	5,788	28.10	32.49	16.23
Agricultural, Pastoral and Mining, &c.	5,711	6,157	7,188	18.63	19.36	20.16
Indefinite	1,436	1,802	(a)9,418	4.68	5.67	(a)26.42
Dependent	8,175	5,211	4,781	26.67	16.39	13.41
Total Male Deaths ..	30,652	31,796	35,651	100.00	100.00	100.00

(a) Includes 2,951 (19.51 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial."

12. *Causes of Death.*—(i) *General.* The classification adopted by the Commonwealth Bureau of Census and Statistics is that of the International Institute of Statistics, as amended by the Committees of Revision which met in Paris in 1900, 1920 and 1929.

(ii) *Mortality Statistics for 1907 and Subsequent Years.* The statistics relating to causes of death in Australia from the year 1907 onward have been tabulated in the Commonwealth Bureau of Census and Statistics in accordance with the above-mentioned classification, and the system is being employed also in the various State statistical offices.

(iii) *Classification of Causes of Death, according to the Intermediate and the Abridged International Classifications.* An abridged classification, which enumerates forty-three diseases and groups of diseases according to the revised classification, has been in use in many European countries and American States until recently, and a table has been prepared in past issues of the Year Book showing the causes of death according to the abridged classification, so that the results may be compared with those of other countries which used the abridged index.

As the result of an international treaty signed in London in 1934, the intermediate classification of causes of death, or the "minimum nomenclature," covering 85 main causes or groups of causes, has now been adopted in most countries for the purpose of making international comparisons. This classification appears in the pages following and shows the number of deaths during 1930 in Australia for each cause enumerated. To preserve continuity with former statistics, particulars for 1930 have been compiled in the abridged form also and are shown on p. 417 in conjunction with those for the four previous years, while averages over quinquennial periods to 1931-35 are shown in the same form on p. 418.

The compilations for the years 1932 to 1936 will be found in full detail in the Bulletins of Australian Demography, Nos. 50 to 54. In the following tables in which the intermediate classification has been employed, tables A, B and C show deaths of males, females and persons for the year 1930. Table D shows in the abridged form the number of persons who died in each of the years 1932 to 1936 and gives the rate per million of population for the last-named year.

Since death rates are subject to continual fluctuation, it is unsafe to base deductions on the figures relating to a single year. In order, therefore, to furnish a valid basis for comparison, Table E giving the number of deaths and the rates per 1,000,000 persons for three quinquennial periods has been prepared. While the absolute number of deaths has increased, the death rate has shown a very satisfactory decrease, which is reflected in the great majority of the causes specified in the table.

A—CAUSES OF DEATH.—MALES, 1936.

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	F. C. T.	Aus- tralia
1. Typhoid and Paratyphoid Fever (1)	1, 2	13	5	9	3	9	1	..	..	40
2. Typhus Fever (2)	3	..	..	3	1	1	..	..	..	5
3. Small-pox (3)	6	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	11	..	7	..	1	6	..	..	25
5. Scarlet Fever (5)	8	12	6	3	..	..	3	..	..	24
6. Whooping Cough (6)	9	51	15	7	2	22	6	..	..	103
7. Diphtheria (7)	10	118	47	24	11	18	15	..	..	233
8a. Influenza—Pneumonic (8a)	11 (a)	91	28	45	6	14	5	..	1	190
8b. Influenza—Other (8b)	11 (b)	36	24	20	..	3	..	..	..	83
9. Dysentery (14)	13	9	1	6	5	2	..	..	..	23
10. Plague (9)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (10)	23	586	394	189	102	140	56	..	..	1,407
12a. Tubercular Meningitis (11a)	24	17	18	1	5	7	7	..	..	55
12b. Other forms of Tuber- culosis (11b)	25-32	33	45	12	7	4	8	..	..	109
13. Syphilis (12)	34	51	30	14	11	16	6	2	..	130
14. Purulent Infection, Septicæmia (non-puerperal) (14)	36	25	20	12	5	2	2	..	..	66
15. Malaria (13)	38	2	..	7	..	..	..	1	..	10
16. Diseases due to other Protozoal Parasites or Helminths (14)	39-42	8	11	5	2	2	..	..	..	28
17. Other Infectious and Parasitic Diseases (14)	*	60	46	20	16	15	8	1	1	167
18. Cancer and other Malignant Tumors (15)	45-53	1,379	1,112	565	367	295	132	5	..	3,855
19. Tumors, Non-malignant or of which the nature is not specified (16)	54-55	82	47	34	24	13	3	..	..	203
20. Acute Rheumatic Fever (20)	56	53	44	14	7	9	4	..	..	131
21. Chronic Rheumatism and Gout (17)	57-58	20	24	4	11	4	3	..	..	66
22. Diabetes Mellitus (18)	59	127	107	48	33	19	19	..	..	353
23. Nutritional Diseases (20)	60-64	1	..	1	1	1	..	..	..	4
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	20	4	6	4	2	1	..	..	37
25. Other General Diseases (20)	65, 67-69	12	15	3	1	4	2	..	..	37
26. Anaemias (20)	71	35	39	17	6	7	6	..	..	110
27. Leucaemias, Pseudoleucaemias, and other Diseases of the Blood and Blood-making Organs (20)	70, 72-74	92	59	28	21	9	2	..	..	211
28. Alcoholism (acute or chronic) (19)	75	14	7	7	2	8	..	1	..	39
29. Other Chronic Poisonings (20)	76, 77	3	..	3	1	..	..	..	..	7
30. Meningitis (23)	79	44	26	13	11	10	5	..	..	109
31. Progressive Locomotor Ataxia (21) (<i>tubes dorsalis</i>)	80	26	10	6	5	4	..	..	..	51
32. Cerebral Hæmorrhage, Cerebral Embolism and Thrombosis (22)	82	436	386	174	178	134	53	2	..	1,363
33. General Paralysis of the Insane (21)	83	39	22	7	5	5	2	..	..	80
34. Dementia Præcox and other Psychoses (23)	84	15	9	21	6	1	2	..	..	54
35. Epilepsy (23)	85	52	32	18	10	5	5	..	..	122
36. Other Diseases of the Nervous System (23)	*	133	83	59	34	20	11	..	..	310
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	33	22	7	12	3	4	..	..	81
38. Pericarditis (24)	90	8	11	5	2	4	1	..	..	31
39. Acute Endocarditis (24)	91	50	24	12	10	6	3	..	..	105
40. Chronic Endocarditis, Valvular Diseases (24)	92	360	273	144	112	62	47	1	..	999
41. Diseases of the Myocardium (24)	93	1,917	1,102	511	313	297	205	8	2	4,355
42. Diseases of the Coronary Arteries and Angina Pectoris (24)	94	778	548	204	145	110	60	..	2	1,847
43. Other Diseases of the Heart (24)	95	273	191	123	49	55	25	1	..	717
44. Aneurysm (except of the Heart) (25)	96	45	52	35	10	11	9	..	..	162
45. Arterioclerosis and Gan- grene (25)	97, 98	672	489	182	109	72	56	..	2	1,582

* No. 17:—4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36:—78, 81, 86, 87.

A.—CAUSES OF DEATH.—MALES, 1936—continued.

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land	S. Aust	W. Aus.	Tas.	Nor. Ter.	F. C. T.	Australia.
46. Other Diseases of the Circulatory System (25)	99-103	34	38	24	19	7	7	..	..	120
47a. Acute Bronchitis (26a)	106 (a) (c)	41	32	13	5	6	3	..	..	100
47b. Chronic Bronchitis (26b)	106 (b) (d)	107	104	45	29	23	13	..	..	321
48. Pneumonias (27)	107-109	997	669	366	202	158	115	2	6	2,515
49. Pleurisy (28)	110	41	54	15	13	6	2	..	1	132
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted)	104, 105, 111-114	122	160	101	59	71	16	..	..	529
51. Ulcer of the Stomach and Duodenum (32b)	117	156	125	62	28	35	7	..	..	413
52. Diarrhoea and Enteritis (under 2 years of age) (29a)	119	81	53	31	12	23	4	..	..	204
53. Diarrhoea and Enteritis (2 years and over) (29b)	120	46	45	32	10	10	8	..	..	151
54. Appendicitis (30)	121	151	84	73	24	24	14	..	..	370
55. Hernia, Intestinal Obstruction (32a)	122	99	88	54	21	21	11	..	..	294
56. Cirrhosis of the Liver (31a)	124	75	57	29	14	20	3	..	..	195
57. Other Diseases of the Liver and Biliary Passages, including Biliary Calculi (31b)	125-127	63	54	24	14	9	2	..	1	167
58. Other Diseases of the Digestive System (32b)	*	85	80	31	20	26	8	1	..	251
59. Nephritis (33)	130-132	890	539	287	143	119	38	1	1	2,018
60. Other Diseases of the Kidneys and Ureters (34)	133	55	52	33	9	17	6	..	..	172
61. Calculi of the Urinary Passages (34)	134	24	15	11	4	5	4	..	..	63
62. Diseases of the Bladder (tumors excepted) (34)	135	11	9	14	2	8	3	..	..	47
63. Diseases of the Urethra, Urinary Abscess, &c. (34)	136	0	8	2	3	1	..	..	..	23
64. Diseases of the Prostate (34)	137	147	178	75	57	31	22	..	..	513
65. Diseases of the Genital Organs, not specified as Venereal	138, 139	3	1	1	..	..	..	..	..	5
71. Diseases of the Skin and Cellular Tissue (37)	151-153	51	21	13	8	7	8	..	..	108
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37)	154-156	37	28	12	5	10	5	..	..	97
73. Congenital Malformations (Stillbirths not included) (38)	157	144	111	64	35	16	17	..	1	388
74. Congenital Debility (38)	158	49	45	17	13	22	5	..	..	151
75. Premature Birth (Stillbirths not included) (38)	159	363	193	134	45	52	40	1	2	830
76. Injury at Birth (Stillbirths not included) (38)	160	112	48	39	15	25	10	..	..	249
77. Other Diseases Peculiar to Early Infancy (38)	161	95	73	47	13	17	13	..	..	258
78. Senility (39)	162	375	613	198	171	00	30	4	..	1,481
79. Suicide (40)	163-171	217	155	112	49	57	20	1	..	611
80. Homicide (41)	172-175	23	13	8	5	11	4	..	..	64
81. Accident (42)	176-194	972	670	431	190	223	86	8	7	2,587
82. Violent Deaths of which the nature (Accident, Suicide, Homicide) is unknown (42)	195	44	89	6	4	7	5	2	..	157
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42)	196, 197	..	1	1	2	3	..	..	..	7
84. Legal Executions (42)	198	2	2	..	..	..	..	..	..	4
85. Cause of Death not specified or Ill-defined (43)	199, 200	55	61	28	53	22	7	9	..	235
Total Males .. ..	..	13,618	9,996	5,068	2,961	2,611	1,319	51	27	35,651

* No. 58 :—115, 116, 118, 123, 128, 129

NOTE.—Figures in parentheses indicate the abridged classification number in each instance.

B—CAUSES OF DEATH.—FEMALES, 1936.

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	F. C. T.	Australia
1. Typhoid and Paratyphoid Fever (1)	1, 2	6	5	4	1	2	..	..	..	18
2. Typhus Fever (2)	3	..	..	..	1	2	..	..	..	3
3. Small-pox (3)	6	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	11	1	5	..	..	1	..	..	18
5. Scarlet Fever (5)	8	14	8	5	1	1	3	..	..	32
6. Whooping Cough (6)	9	00	35	9	7	20	5	..	..	154
7. Diphtheria (7)	10	102	52	23	19	18	5	2	..	221
8a. Influenza—Pneumonic (8a)	11 (a)	66	13	33	8	10	1	..	2	133
8b. Influenza—Other (8b)	11 (b)	21	18	19	3	6	1	..	..	68
9. Dysentery (14)	13	3	1	1	3	3	..	..	..	11
10. Plague (9)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (10)	23	369	368	120	102	53	56	1	1	1,070
12a. Tubercular Meningitis (11a)	24	20	20	2	7	2	3	..	..	54
12b. Other forms of Tuberculosis (11b)	25-32	26	25	10	12	3	5	..	..	81
13. Syphilis (12)	34	10	9	4	3	3	4	..	..	39
14. Purulent Infection, Septicæmia (non-puerperal) (14)	36	13	19	7	7	1	1	..	..	48
15. Malaria (13)	38	1	..	..	..	..	..	..	..	1
16. Diseases due to other Protozoal Parasites or Helminths (14)	39-42	16	6	4	..	..	..	..	..	26
17. Other Infectious and Parasitic Diseases (14)	•	49	34	14	16	12	2	..	..	127
18. Cancer and other Malignant Tumors (15)	45-53	1,402	1,176	404	374	188	151	1	..	3,696
19. Tumors, Non-malignant or of which the nature is not specified (16)	54, 55 *	94	59	41	27	16	9	..	..	246
20. Acute Rheumatic Fever (20)	56	39	55	20	9	7	3	..	..	133
21. Chronic Rheumatism and Gout (17)	57, 58	25	42	7	7	4	1	..	..	86
22. Diabetes Mellitus (18)	59	286	204	85	77	28	19	..	..	699
23. Nutritional Diseases (20)	60-64	1	..	..	..	..	..	..	..	1
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	78	52	32	10	17	11	..	..	200
25. Other General Diseases (20)	65, 67-69	8	12	3	4	4	1	..	..	32
26. Anaemias (20)	71	40	47	13	14	12	9	..	..	135
27. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20)	70, 72-74	57	39	29	16	6	5	..	..	152
28. Alcoholism (acute or chronic) (19)	75	9	3	1	2	..	..	..	..	15
29. Other Chronic Poisonings (20)	76, 77	..	..	4	..	..	..	..	..	4
30. Meningitis (23)	79	26	17	11	6	1	3	..	..	64
31. Progressive Locomotor Ataxia (21) (<i>tapes dorsalis</i>)	80	3	1	2	1	..	..	..	..	7
32. Cerebral Hæmorrhage, Cerebral Embolism and Thrombosis (22)	82	486	504	194	207	114	71	..	1	1,667
33. General Paralysis of the Insane (21)	83	7	8	3	..	1	..	..	..	19
34. Dementia Præcox and other Psychoses (23)	84	16	4	14	7	2	1	..	..	44
35. Epilepsy (23)	85	26	21	8	4	4	2	..	..	65
36. Other Diseases of the Nervous System (23)	•	90	84	36	36	17	13	..	..	276
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	26	9	4	5	3	1	..	..	48
38. Pericarditis (24)	90	7	5	1	3	..	..	..	..	16
39. Acute Endocarditis (24)	91	34	33	6	7	3	2	..	..	85
40. Chronic Endocarditis, Valvular Diseases (24)	92	281	266	86	66	34	41	..	..	774
41. Diseases of the Myocardium (24)	93	1,618	936	367	280	174	164	..	2	3,541
42. Diseases of the Coronary Arteries and Angina Pectoris (24)	94	365	228	89	66	38	25	..	1	812
43. Other Diseases of the Heart (24)	95	138	195	60	47	34	26	..	..	500
44. Aneurysm (except of the Heart) (25)	96	23	15	8	3	3	3	..	..	55
45. Arteriosclerosis and Gangrene (25)	97, 98	699	631	157	128	52	38	..	..	1,705
46. Other Diseases of the Circulatory System (25)	99-103	29	51	19	7	12	8	..	..	126
47a. Acute Bronchitis (26a)	106 (a) (c)	40	15	13	2*	6	3	..	..	99

* No. 17:—4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36:—78, 81, 86, 87.

B—CAUSES OF DEATH.—FEMALES, 1936—*continued.*

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aus.	Tas.	Nor. Ter.	F. T.	Aboriginal.
47b. Chronic Bronchitis (26b) ..	106 (b) (d)	63	85	38	18	0	7	..	1	22
48. Pneumonias (27) ..	107-109	737	572	235	140	117	78	..	2	1,881
49. Pleurisy (28) ..	110	21	27	5	6	5	2	..	..	66
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted) ..	104, 105, 111-114	88	83	49	46	20	20	..	1	342
51. Ulcer of the Stomach and Duodenum (32b) ..	117	37	33	11	8	5	..	..	..	96
52. Diarrhoea and Enteritis (under 2 years of age) (29a) ..	119	69	44	21	6	13	1	..	..	154
53. Diarrhoea and Enteritis (2 years and over) (29b) ..	120	60	57	33	12	17	5	1	..	283
54. Appendicitis (30) ..	121	76	59	24	11	3	10	..	1	183
55. Hernia, Intestinal Obstruction (32a) ..	122	91	71	31	30	26	8	..	..	267
56. Cirrhosis of the Liver (31a) ..	124	36	29	10	2	8	1	..	..	8
57. Other Diseases of the Liver and Biliary Passages including Biliary Calculi (31b) ..	125-127	104	101	51	22	23	8	..	..	309
58. Other Diseases of the Digestive System (32b) ..	*	77	77	30	18	21	5	..	..	213
59. Nephritis (33) ..	130-132	659	520	280	109	74	33	2	..	1,677
60. Other Diseases of the Kidneys and Ureters (34) ..	133	54	39	21	13	15	..	..	..	141
61. Calculi of the Urinary Passages (34) ..	134	22	6	7	2	2	..	..	..	39
62. Diseases of the Bladder (Tumors excepted) (34) ..	135	3	5	5	1	1	2	..	..	17
63. Diseases of the Urethra, Urinary Abscess, &c (34) ..	136	2	..	..	..	..	..	..	..	2
64. Diseases of the Prostate (34) ..	137	..	..	..	..	..	..	..	..	..
65. Diseases of the Genital Organs not specified as Venereal (34) ..	138, 139	74	36	28	10	14	5	..	..	196
66. Accidents of Pregnancy (36) ..	141-143	25	18	10	5	4	1	..	1	73
67. Puerperal Hemorrhage (36) ..	144	34	17	7	7	6	8	..	..	79
68a. Post-abortive Sepsis (35a) ..	140 (a)	37	7	16	15	8	3	..	..	87
68b. Criminal Abortion (35b) ..	140 (b)	56	49	7	5	7	3	..	..	127
68c. Puerperal Septicæmia (35c) ..	145	45	40	14	7	5	14	..	..	128
69. Toxaemias of Pregnancy: Albuminuria Eclampsia, etc (36) ..	146, 147	51	26	17	10	8	4	..	..	149
70. Other Puerperal Causes (36) ..	148-150	44	24	11	4	5	2	..	..	90
71. Diseases of the Skin and Cellular Tissue (37) ..	151-153	50	21	10	6	8	5	..	1	191
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37) ..	154-156	17	24	6	3	9	3	..	..	62
73. Congenital Malformations (Stillbirths not included) (38) ..	157	106	75	42	22	16	12	..	..	273
74. Congenital Debility (38) ..	158	53	30	15	9	13	10	..	..	150
75. Premature Birth (Stillbirths not included) (38) ..	159	311	137	97	44	48	35	..	..	722
76. Injury at Birth (Stillbirths not included) (38) ..	160	80	33	27	11	8	4	..	..	193
77. Other Diseases peculiar to early Infancy (38) ..	161	70	64	30	9	6	10	..	..	184
78. Senility (39) ..	162	330	644	174	147	73	35	..	..	1,105
79. Suicide (40) ..	163-171	74	43	26	20	13	2	..	..	178
80. Homicide (41) ..	172-175	14	5	7	1	4	2	..	..	33
81. Accident (42) ..	176-194	304	205	131	69	73	29	..	2	813
82. Violent Deaths of which the Nature (Accident, Suicide, Homicide) is unknown (42) ..	195	14	23	2	..	2	..	..	..	41
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42) ..	196, 197	..	..	..	..	..	..	..	..	..
84. Legal Executions (42) ..	198	..	..	..	..	..	..	..	..	..
85. Cause of Death not specified or ill-defined (43) ..	199, 200	15	32	11	30	5	4	2	1	100
Total—Females ..	..	10,758	8,782	3,525	2,503	1,619	1,068	9	17	28,381

* No. 58:—115, 116, 118, 123, 128, 130.

NOTE.—Figures in parentheses indicate the abridged classification number in each instance.

C—CAUSES OF DEATH.—PERSONS, 1936.

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	F. C. T.	Ang. tralia
1. Typhoid and Paratyphoid Fever (1)	1, 2	14	10	13	1	11	1	..	..	87
2. Typhus Fever (2)	3	..	..	5	..	3	..	..	..	..
3. Small-pox (3)	6	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	12	1	12	..	..	..	..	..	13
5. Scarlet Fever (5)	8	31	11	8	1	1	6	..	..	56
6. Whooping Cough (6)	9	120	50	10	..	51	11	..	..	157
7. Diphtheria (7)	10	12	93	17	30	8	29	2	..	181
8a. Influenza—Pneumonic (8a) ..	114	12	41	38	44	24	6	..	3	38
8b. Influenza—Other (8b)	119	37	12	49	3	9	4	..	4	131
9. Dysentery (14)	13	12	2	..	8	5	..	..	1	31
10. Plague (6)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (25)	23	58	72	59	201	193	112	1	1	2,537
12a. Tubercular Meningitis (12a) ..	24	37	38	3	42	4	10	..	..	169
12b. Other forms of Tuberculosis (12b)	25-31	50	70	22	11	7	13	..	..	100
13. Syphilis (12)	34	67	39	18	14	19	10	2	1	169
14. Parenteral Infection, Septicæmia (non-puerperal) (14)	35	38	39	10	12	3	3	..	..	111
15. Malaria (13)	38	3	..	7	..	..	..	1	..	11
16. Diseases due to other Protozoal Parasites or Helminths (14) ..	39-42	24	17	9	2	2	..	..	..	54
17. Other Infectious and Parasitic Diseases (14)	•	100	86	31	32	27	10	1	1	294
18. Cancer and other Malignant Tumors (15)	45-53	2,781	2,288	60	701	183	283	0	..	7,551
19. Tumors, non-malignant or of which the nature is not specified (16)	54, 55	170	106	75	51	20	12	..	..	449
20. Acute Rheumatic Fever (20)	56	92	99	51	16	16	7	..	..	294
21. Chronic Rheumatism and Gout (17)	57, 58	45	60	11	18	8	4	..	..	157
22. Diabetes Mellitus (18)	59	443	311	133	119	17	38	..	..	1,082
23. Nutritional Diseases (20)	60-64	2	..	1	1	1	..	..	..	5
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	97	56	33	14	19	12	..	..	237
25. Other General Diseases (20)	65, 67-69	29	27	6	8	8	3	..	..	99
26. Anæmias (20)	71	75	86	30	90	10	13	..	..	218
27. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20) ..	70, 72-71	149	98	57	37	13	7	..	..	374
28. Alcoholism (acute or chronic) (19) ..	75	23	10	8	4	8	..	1	..	54
29. Other Chronic Poisonings (20)	76, 77	3	..	7	1	..	..	..	..	14
30. Meningitis (21)	79	..	13	21	17	11	8	..	..	125
31. Progressive locomotor ataxia (21) (<i>tuber dorsalis</i>)	80	29	11	8	6	4	..	..	..	58
32. Cerebral Hemorrhage, Cerebral Embolism and Thrombosis (22) ..	82	922	550	398	68	248	124	2	1	3,039
33. General Paralysis of the Insane (21)	83	19	30	10	8	6	2	..	..	99
34. Dementia Præcox and other Psychoses (23)	84	31	13	3	13	3	3	..	..	98
35. Epilepsy (23)	85	73	83	20	14	9	7	..	..	187
36. Other Diseases of the Nervous System (23)	•	123	147	23	70	37	24	..	..	610
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	59	11	11	17	6	5	..	..	129
38. Pericarditis (21)	90	13	10	6	5	4	1	..	..	47
39. Acute Endocarditis (24)	91	81	87	18	17	9	5	..	..	190
40. Chronic Endocarditis, Valvular Diseases (24)	92	941	539	40	188	96	88	1	..	1,773
41. Diseases of the Myocardium (24) ..	93	3,535	2,018	78	993	171	699	5	4	7,843
42. Diseases of the Coronary Arteries and Angina Pectoris (21)	94	1,343	776	294	114	113	85	..	3	2,009
43. Other Diseases of the Heart (21) ..	95	411	380	153	36	86	81	1	..	1,247
44. Aneurysm (except of the heart) (25)	96	68	67	13	13	11	11	..	..	217
45. Arteriosclerosis and Gangrene (25) ..	97, 98	1,371	1,120	349	537	124	91	..	2	3,528
46. Other Diseases of the Circulatory System (25)	99-103	63	89	43	26	19	15	..	..	255
47a. Acute Bronchitis (26a)	106 (a) (c)	81	47	26	27	12	6	..	..	199
47b. Chronic Bronchitis (26b)	106 (b) (d)	170	189	83	47	32	20	..	1	542
48. Pneumonias (27)	107-109	1,734	1,241	601	342	275	193	2	8	4,396

* No. 17:—4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36:—78, 81, 86, 87.

C—CAUSES OF DEATH.—PERSONS, 1936—continued.

INTERMEDIATE CLASSIFICATION.

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aus.	Tas.	Nor. Ter.	F. C. T.	Australia.
49. Pleurisy (28)	110	62	81	20	19	11	4	..	1	198
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted)	104, 105, 111-114	210	248	150	105	91	36	..	1	841
51. Ulcer of the Stomach and Duodenum (32b)	117	193	158	73	36	40	7	..	..	507
52. Diarrhoea and Enteritis (under 2 years of age) (29a)	119	150	97	52	18	36	5	..	..	358
53. Diarrhoea and Enteritis (2 years and over) (29b)	120	106	102	65	22	27	13	1	..	336
54. Appendicitis (30)	121	227	143	97	35	27	24	..	1	554
55. Hernia, Intestinal Obstruction (32a)	122	190	159	85	51	47	19	..	..	551
56. Cirrhosis of the Liver (31a)	124	111	86	39	16	28	4	..	..	284
57. Other Diseases of the Liver and Biliary Passages, including Biliary Calculi (31b)	125-127	167	155	75	30	32	10	..	1	470
58. Other Diseases of the Digestive System (32b)	*	162	157	61	38	47	13	1	..	479
59. Nephritis (33)	130-132	1,549	1,059	507	252	193	71	3	1	3,095
60. Other Diseases of the Kidneys and Ureters (34)	133	109	91	54	22	32	6	..	..	314
61. Calculi of the Urinary Passages (34)	134	46	21	18	6	7	4	..	..	102
62. Diseases of the Bladder (Tumors excepted) (34)	135	14	14	19	3	9	5	..	..	64
63. Diseases of the Urethra, Urinary Abscess, etc. (34)	136	11	8	2	3	1	..	..	..	25
64. Diseases of the Prostate (34)	137	147	178	75	57	34	22	..	..	513
65. Diseases of the Genital Organs, not specified as Venereal	138, 139	77	37	29	10	14	5	..	..	172
66. Accidents of Pregnancy (36)	141-143	25	18	19	5	4	1	..	1	73
67. Puerperal Hemorrhage (36)	144	34	17	7	7	0	8	..	..	70
68a. Post-abortive Sepsis (35a)	140(a)	37	7	16	15	8	3	..	..	86
68b. Criminal Abortion (35b)	140(b)	56	49	7	5	7	3	..	..	127
68c. Puerperal Septicæmia (35c)	145	45	40	14	7	5	14	..	..	125
69. Toxaemias of Pregnancy: Albuminuria, Eclampsia, etc. (36)	146, 147	51	26	17	10	8	4	..	..	116
70. Other Puerperal Causes (36)	148-150	14	24	11	4	5	2	..	..	90
71. Diseases of the Skin and Cellular Tissue (37)	151-153	101	42	23	14	15	13	..	1	209
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37)	154-156	54	52	18	8	19	8	..	..	159
73. Congenital Malformations (Stillbirths not included) (38)	157	250	186	106	57	32	20	..	1	661
74. Congenital Debility (38)	158	102	75	32	22	35	15	..	..	281
75. Premature Birth (Stillbirths not included) (38)	159	674	330	231	89	100	75	1	2	1,502
76. Injury at Birth (Stillbirths not included) (38)	160	192	81	66	26	33	14	..	..	412
77. Other Diseases peculiar to Early Infancy (38)	161	165	137	77	22	23	23	..	..	447
78. Senility (39)	162	705	1,257	372	318	163	65	4	..	2,884
79. Suicide (40)	163-171	291	198	138	69	70	22	1	..	789
80. Homicide (41)	172-175	37	18	15	6	15	6	..	..	97
81. Accident (42)	176-194	1,276	875	562	259	296	115	8	9	3,400
82. Violent Deaths of which the Nature (Accident, Suicide, Homicide) is unknown (42)	195	58	112	8	4	9	5	2	..	198
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42)	196, 197	..	1	1	2	3	..	..	..	7
84. Legal Executions (42)	198	2	2	..	..	..	..	..	..	4
85. Cause of Death not Specified or Ill-defined (43)	199, 200	70	93	39	83	27	11	11	1	335
Total .. .. .	..	24,376	18,778	8,593	5,464	4,230	2,387	60	44	63,932

* No. 58:—115, 116, 118, 123, 128, 129.

NOTE.—Figures in parentheses indicate the abridged classification number in each instance.

D—CAUSES OF DEATH.—ABRIDGED CLASSIFICATION, AUSTRALIA, 1932 TO 1936.

Abridged Classification.	General Classifi- cation Numbers.	1932.	1933.	1934.	1935.	1936.	1936— Rate per 1,000,000 Population
1. Typhoid Fever	1, 2	81	64	68	63	58	9
2. Typhus Fever	3	5	3	..	6	8	1
3. Small-pox	6	1	..	..	..	..	..
4. Measles	7	35	105	77	129	43	6
5. Scarlet Fever	8	106	80	45	26	50	8
6. Whooping Cough	9	153	124	443	162	257	38
7. Diphtheria	10	425	405	418	412	454	67
8a. Influenza—Pneumonic	11(a)	195	561	646	871	323	48
8b. Influenza—Other	11(b)	154	318	297	297	157	22
10. Tuberculosis of the Respiratory System	23	2,661	2,506	2,588	2,553	2,537	374
11a. Tubercular Meningitis	24	138	100	123	105	109	16
11b. Other Tuberculous Diseases	25-32	205	228	196	195	190	28
12. Syphilis	34	164	158	173	162	169	25
13. Malaria	38	16	12	28	17	11	2
14. Other Infectious or Parasitic Diseases .. .. .	..	609	517	501	487	496	73
15. Cancer and other Malignant Tumors	45-53	6,875	6,971	7,080	7,310	7,551	1,114
16. Tumors, Non-Malignant or of Unspecified Nature	54, 55	360	347	356	409	449	66
17. Chronic Rheumatism, Gout	57, 58	152	158	192	174	152	23
18. Diabetes Mellitus	59	999	1,060	1,046	1,088	1,052	155
19. Acute and Chronic Alcoholism	75	52	48	42	41	54	8
20. Other General Diseases .. .. .	..	1,072	1,041	1,101	1,121	1,194	176
21. Locomotor Ataxy, General Paralysis of Insane	80, 83	144	179	143	162	157	23
22. Cerebral Hæmorrhage, Embolism, etc.	82	3,021	3,206	3,124	3,029	3,030	447
23. Other Diseases of Nervous System and Sense Organs .. .. .	..	1,176	1,199	1,319	1,172	1,203	178
24. Diseases of the Heart	90-95	11,074	12,002	12,907	13,862	13,782	2,012
25. Other Diseases of the Circulatory System	96-103	2,626	2,778	3,122	3,448	3,789	540
26a. Acute Bronchitis	106(a)(c)	211	234	227	180	100	20
26b. Chronic Bronchitis	106(b)(d)	551	577	592	606	542	80
27. Pneumonia (all forms)	107-109	3,441	3,934	4,358	4,629	4,396	649
28. Other Diseases of the Respiratory System	104, 105, 110-114	960	1,003	1,080	994	1,039	153
29a. Diarrhoea and Enteritis (under two years of age)	119	472	339	385	317	358	53
29b. Diarrhoea and Enteritis (two years and over)	120	404	364	427	314	336	50
30. Appendicitis	121	491	517	546	608	554	82
31a. Cirrhosis of the Liver	124	267	254	259	289	284	42
31b. Other Diseases of the Liver and Biliary Calculi	125-127	477	486	484	457	476	70
32a. Hernia, Intestinal Obstruction	122	550	539	582	598	551	81
32b. Other Diseases of the Digestive System .. .. .	..	871	882	906	913	986	140
33. Nephritis	130-132	3,440	3,562	3,725	3,721	3,695	545
34. Other Diseases of the Genito-Urinary System	133-139	1,079	1,041	1,068	1,173	1,100	176
35a. Post-Abortive Sepsis	140(a)	71	68	63	58	80	13
35b. Criminal Abortion	140(b)	88	72	96	98	127	19
35c. Puerperal Septicæmia	145	84	92	98	89	125	18
36. Other Diseases of Pregnancy and Labour	141-144, 146-150	375	349	374	315	..	..
37. Diseases of the Skin, Bones, etc.	151-156	339	349	359	325	368	51
38. Congenital Debility, Malformations, Premature Birth, etc.	157-161	3,174	3,142	3,173	3,161	3,303	487
39. Senility	162	2,750	2,887	2,878	2,756	2,884	420
40. Suicide	163-171	754	790	826	791	780	110
41. Homicide	172-175	91	97	108	106	97	14
42. Accidental or Violent Death (except Suicide and Homicide)	176-198	3,042	2,979	3,270	3,411	3,600	533
43. Non-specified and Ill-Defined Causes	199, 200	276	310	310	359	335	49
Total .. .. .	..	56,757	59,117	62,229	63,599	63,932	9,433

* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89;
No. 32b:—115-118, 123, 128, 129.

E—CAUSES OF DEATH.—ABRIDGED CLASSIFICATION, AUSTRALIA, NUMBERS AND RATES.

Abridged Classification.	General Classification Numbers.	Number of Deaths.			Average Rate per 1,000,000 Population.		
		1911-15.	1921-25.	1931-35.	1911-15.	1921-25.	1931-35.
1. Typhoid Fever	1, 2	2,848	1,209	379	119	42	12
2. Typhus Fever	3	..	4	15	..	..	1
3. Small-pox	6	6	4	1	..	..	..
4. Measles	7	1,505	582	391	63	20	12
5. Scarlet Fever	8	237	235	331	10	8	10
6. Whooping Cough	9	1,657	1,612	1,186	69	57	33
7. Diphtheria	10	3,677	2,565	2,083	154	90	63
8a. Influenza—Pneumonic	11(a)	1,894	1,808	2,859	79	64	60
8b. Influenza—Other	11(b)		1,344	1,320		47	40
9. Plague	14	..	72	..	..	3	..
10. Tuberculosis of the Respiratory System	23	15,737	15,321	13,221	659	538	450
11a. Tubercular Meningitis	24	1,156	876	618	48	31	11
11b. Other Tuberculous Diseases	25-32	1,460	1,404	1,016	61	49	31
12. Syphilis	34	837	632	803	35	22	24
13. Malaria	38	112	150	97	5	5	3
14. Other Infectious or Parasitic Diseases	*	1,500	3,000	2,000	100	100	80
15. Cancer and other Malignant Tumours	45-53	17,338	45,794	34,825	740	900	1,053
16. Tumours, Non-Malignant or of Unspecified Nature .. .. .	..	..	..	..	..	..	..
17. Chronic Rheumatism, Gout	54, 55	546	633	1,817	23	22	55
18. Diabetes Mellitus	57, 58	552	862	847	23	30	26
19. Acute and Chronic Alcoholism	59	2,322	3,355	5,095	97	118	154
20. Other General Diseases	75	920	793	235	38	27	7
21. Locomotor Ataxy, General Paralysis of Insane	*	4,039	5,355	5,437	169	188	164
22. Cerebral Hemorrhage, Embolism, etc.	80-93	1,074	1,118	707	45	30	24
23. Other Diseases of Nervous System and Sense Organs	82	10,957	13,037	15,264	458	479	461
24. Diseases of the Heart	*	12,550	10,323	5,071	525	363	181
25. Other Diseases of the Circulatory System	90-95	24,353	31,585	30,227	1,011	1,100	1,017
26a. Acute Bronchitis	96-103	7,809	7,191	14,511	329	253	435
26b. Chronic Bronchitis	106(a)(c)	2,250	1,580	1,078	94	56	33
27. Pneumonia (all forms)	106(b)(d)	4,062	4,083	2,066	200	142	80
28. Other Diseases of the Respiratory System	107-109	13,201	15,400	20,187	635	646	668
29a. Diarrhoea and Enteritis (under two years of age)	110, 105	4,583	5,781	5,045	192	203	152
29b. Diarrhoea and Enteritis (two years and over)	110-114	..	..	..	..	..	..
30. Appendicitis	119	15,207	9,866	2,013	636	346	62
31a. Cirrhosis of the Liver	120	4,027	3,144	1,922	169	120	58
31b. Other Diseases of the Liver and Biliary Calculi	121	1,761	2,035	2,680	74	71	81
32a. Hernia, Intestinal Obstruction	124	1,932	1,531	1,321	81	54	40
32b. Other Diseases of the Digestive System	125-127	1,445	1,296	2,326	60	63	70
33. Nephritis	122	4,330	2,048	2,792	98	93	84
34. Other Diseases of the Genito-Urinary System	130-132	3,068	4,053	1,104	106	142	133
35a. Post-Abortive Sepsis	133-139	10,751	12,803	17,754	450	450	530
35b. Criminal Abortion	140(a)	3,065	4,116	5,888	128	146	161
35c. Puerperal Septicæmia	140(b)	†	†	336	†	†	13
36. Other Diseases of Pregnancy and Labour	145	1,072	1,138	466	45	40	14
37. Diseases of the Skin, Bones, etc.	141-144, 146-150	2,060	2,321	1,833	86	82	58
38. Congenital Debility, Malformations, Premature Birth, etc.	151-156	994	1,556	1,696	42	55	51
39. Senility	157-161	21,410	21,511	15,909	896	755	481
40. Suicide	162	20,904	20,429	14,021	875	717	424
41. Homicide	163-171	3,123	3,106	3,988	131	109	121
42. Accidental or Violent Death (except Suicide and Homicide)	172-175	446	439	530	19	15	16
43. Non-specified and Ill-Defined Causes	176-198	14,842	13,875	15,639	621	487	472
Total	199, 200	3,016	3,460	1,542	127	122	46
Total .. .. .	..	256,337	271,171	298,262	10,726	9,522	9,011

* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89, No. 33b:—115-118, 123, 128, 129.

† Not available, included in 35c and 36.

13. **Deaths from Principal Specific Causes.**—(i) *General.* In the preceding tables particulars have been given for each of the causes of death comprising the Intermediate and the Abridged Classifications. The more important of these causes are treated in detail hereunder. The intermediate classification number is indicated in parentheses for each cause or group of causes.

(ii) *Tuberculosis of the Respiratory System (11).* Of the various forms of tuberculosis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The intimate relation, however, between tuberculosis of the lungs and of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for investigations concerning the age incidence and duration of this disease.

The decline in the toll levied by this disease on the community is plainly disclosed by the table on page 418, which shows how both the number of deaths and the death rate have declined since the period 1911 to 1915.

During 1936 there were 2,537 deaths (1,467 males and 1,070 females) from tuberculosis of the respiratory system, which compares favourably with the average of 2,644 for the preceding five years. The deaths in 1936 represented a rate of 374 per 1,000,000 persons living.

(iii) *Tuberculosis of the Meninges (12a).* The number of deaths ascribed to this cause in 1936 was 109, which is below the average of 124 for the preceding five years.

(iv) *Other Forms of Tuberculosis (12b).* The 190 deaths in 1936 comprise the following:—Tuberculosis of the intestines and peritoneum, 40; vertebral column, 47; other bones and joints, 10; skin and sub-cutaneous cellular tissue, 1; genito-urinary system, 28; other organs, 2; and disseminated tuberculosis—acute 55, chronic 3 and unspecified 4.

(v) *All Forms of Tuberculosis (11, 12)*—(a) *General.* The total number of deaths in 1936 was 2,836, viz., 1,631 males and 1,205 females.

(b) *Ages at Death.* The following table shows the ages of the 2,836 persons. Corresponding figures are also given for the year 1911:—

TUBERCULAR DISEASES.—DEATHS IN AGE-GROUPS, AUSTRALIA.

Ages.	1911.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years	124	114	238	42	33	75
5 years and under 10 ..	30	31	61	14	17	31
10 " " 15 ..	44	42	86	14	12	26
15 " " 20 ..	70	148	218	28	78	106
20 " " 25 ..	168	260	428	82	156	238
25 " " 30 ..	219	255	474	108	199	307
30 " " 35 ..	220	206	426	115	151	266
35 " " 40 ..	187	176	363	145	132	277
40 " " 45 ..	246	140	386	170	101	271
45 " " 50 ..	223	100	323	212	60	272
50 " " 55 ..	164	49	213	184	71	255
55 " " 60 ..	140	49	189	166	42	208
60 " " 65 ..	89	43	132	150	60	210
65 " " 70 ..	64	37	101	116	43	159
70 " " 75 ..	42	19	61	47	28	75
75 " " 80 ..	15	6	21	24	13	37
80 " over ..	7	6	13	14	9	23
Age unspecified	3	..	3	..	..	..
Total	2,055	1,681	3,736	1,631	1,205	2,836

(c) *Occupations at Death, Males.* A tabulation of occupations of the males who died from tubercular diseases in 1921, 1931 and 1936, together with the percentage which each class bears on the total male deaths from these diseases, is given hereunder:—

OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASES.— AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1936.	1921.	1931.	1936.
				%	%	%
Professional	167	107	94	7.69	5.83	5.76
Domestic	95	64	40	4.38	3.48	2.45
Commercial	292	270	124	13.45	14.71	7.60
Transport and Communication	165	170	144	7.60	9.26	8.83
Industrial	784	694	319	36.11	37.80	19.56
Agricultural, Pastoral, Mining, etc.	404	303	260	18.61	16.50	15.94
Indefinite	80	157	(a) 537	3.68	8.55	(a) 32.93
Dependent	184	71	113	8.48	3.87	6.93
Total Male Deaths ..	2,171	1,836	1,631	100.00	100.00	100.00

(a) Includes 409 (25.08 per cent.) clerks, labourers, etc., not specified as belonging to any industry who were formerly included under "Commercial" or "Industrial".

(d) *Length of Residence in Australia.* The length of residence in Australia of persons who died from tubercular diseases in 1936 is given in the next table:—

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1936.

Length of Residence in Australia.	Male.			Length of Residence in Australia.	Male.		
	Male.	Fem.	Total.		Male.	Fem.	Total
Born in Australia ..	1,242	1,041	2,283	Resident 10 years & under 15 ..	44	27	71
Resident under 1 year ..	4	..	4	" 15 20 ..	17	17	34
" 1 year .. ..	..	2	2	" 20 & over ..	229	75	304
" 2 years	1	3	4	Length of residence not stated ..	58	16	74
" 3 .. ..	..	..	..	
" 4 .. ..	..	1	1				
" 5	32	23	55	Total Deaths ..	1,631	1,205	2,836

The preceding table and the table on page 409 show that among persons who have lived less than five years in Australia, 152 deaths occurred, and of these, 15, or 9.9 per cent., were due to tubercular diseases.

(e) *Death Rates.* In order to show the relative occurrence of tuberculosis in the several States and the change in the incidence in recent years the death rates from tubercular diseases in respect of the years 1911 and 1936 are given in the following table, together with the proportion which deaths from tuberculosis bear to 10,000 deaths from all causes:—

TUBERCULOSIS (ALL FORMS).—DEATH RATES (a) AND PROPORTION OF TOTAL DEATHS.

State or Territory.	Death Rate per 100,000 of Mean Population.					
	1911.			1936.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	85	67	76	47	31	39
Victoria	101	97	99	50	44	47
Queensland	74	58	67	39	28	34
South Australia ..	81	91	86	39	41	40
Western Australia ..	84	71	78	63	27	46
Tasmania	90	82	86	61	56	58
Northern Territory ..	293	..	241	..	59	19
Federal Capital Territory ..	..	131	56	..	22.	10
Australia	88	78	83	48	36	42

(a) Number of deaths from tuberculosis per 100,000 of mean population.

TUBERCULOSIS (ALL FORMS).—DEATH RATES AND PROPORTION OF TOTAL DEATHS—*continued*.

Proportion per 10,000 Deaths from all Causes.

State or Territory.	1911.			1936.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales	737	737	737	467	386	431
Victoria	801	936	862	457	470	463
Queensland	613	648	626	399	374	389
South Australia	775	995	877	385	483	430
Western Australia	718	870	770	578	358	494
Tasmania	839	854	846	538	599	566
Northern Territory	1,356	..	1,231	..	1,111	167
Federal Capital Territory .. ..	..	2,000	1,000	..	588	227
Australia	745	829	780	457	426	444

(f) *Death Rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death rate from this disease :—

TUBERCULOSIS.—DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Respiratory System.	All Forms.	Country.	Year.	Respiratory System.	All Forms.
Queensland	1935	32	34	Belgium	1934	56	73
Union of South Africa (Whites) ..	1934	31	35	Scotland	1935	57	74
New South Wales ..	1935	35	39	Great Britain and Northern Ireland ..	1934	63	76
New Zealand	1935	32	39	Italy	1934	69	92
Australia	1935	38	42	Sweden	1935	(a)	94
South Australia ..	1935	39	44	Switzerland	1934	74	97
Victoria	1935	41	48	Northern Ireland ..	1935	80	105
Western Australia ..	1935	47	51	Norway	1934	93	113
Netherlands	1934	39	55	Spain	1933	94	118
Denmark	1934	43	55	Irish Free State ..	1935	98	124
Tasmania	1935	46	57	Czechoslovakia ..	1935	120	135
United States (Registration Area) ..	1934	51	57	Greece	1932	120	140
Egypt	1934	44	57	Greece	1933	122	152
Ceylon	1933	(a)	58	Hungary	1935	134	159
Canada (including Quebec)	1933	53	65	Poland (b)	1933	148	172
England and Wales ..	1935	61	72	Japan	1934	142	193
Germany	1933	62	73	Finland	1933	171	200

(a) Not available.

(b) In towns with over 100,000 inhabitants.

(vi) *Cancer and other Malignant Tumours (18).*—(a) *General.* The number of deaths from cancer increased continuously to 6,256 in 1929, declined slightly to 6,120 in 1930, but rose again progressively to 7,551 in 1936. Of the deaths registered during 1936, 3,855 were of males, viz., 1,379 in New South Wales, 1,112 in Victoria, 565 in Queensland, 397 in South Australia, 295 in Western Australia, 132 in Tasmania, and 5 in the Northern Territory; while 3,696 were of females, viz., 1,402 in New South Wales, 1,170 in Victoria, 404 in Queensland, 374 in South Australia, 188 in Western Australia, 151 in Tasmania, and 1 in the Northern Territory.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease, in conjunction with age and with conjugal condition, of the persons dying from cancer in 1936 will be found in Bulletin No. 54 of Australian Demography. A summary regarding type and seat of disease for the year 1936 is given below. It may be pointed out that the significance of the numbers of deaths shown for the various types of cancer enumerated hereunder is doubtful owing to the fact that in the absence of a post-mortem it is impracticable for the certifying doctor in the majority of cases to make an accurate diagnosis as to type in the detail required for the following classification. On this account it is proposed to discontinue the use of the present classification and to adopt as soon as possible a simpler grouping showing only the more important types of cancer.

DEATHS FROM CANCER.—TYPE AND SEAT OF DISEASE, AUSTRALIA, 1936.

Type of Disease.	Males.	Fem.	Persons.	Seat of Disease.	Males.	Fem.	Persons.
Cancer	385	353	738	Buccal Cavity and			
Carcinoma—				Pharynx ..	361	50	411
Carcinoma Simplex	2,844	2,800	5,644	Digestive Tract and			
Epithelioma ..	160	68	228	Peritoneum—			
Scirrhus ..	2	29	31	Stomach and			
Rodent Ulcer ..	34	24	58	Duodenum ..	1,110	628	1,738
Adeno-Carcinoma	27	44	71	Rectum ..	210	158	368
Colloid Carcinoma	..	2	2	Colon ..	239	307	546
Sarcoma—				Other ..	685	590	1,275
Sarcoma ..	130	108	238	Respiratory Organs	250	77	327
Myeloma ..	4	3	7	Uterus ..	..	539	539
Endothelioma ..	4	6	10	Other Female Geni-			
Melanoma—				tal Organs ..	..	241	241
Melanotic Sarcoma	12	14	26	Breast ..	7	735	742
Melano-Carcinoma	8	8	16	Male Genito-Urinary			
Embryonic Tu-				Organs ..	619	..	619
mours—				Skin ..	138	70	208
Hypernephroma	21	13	34	Other or Unspecified			
Teratoma ..	..	1	1	Organs ..	236	301	537
Malignant Disease..	224	223	447				
Total Deaths	3,855	3,696	7,551	Total Deaths	3,855	3,696	7,551

(c) *Ages at Death.* The ages of the persons who died from cancer in 1911 and 1936 are given below. Inferences drawn from the great increase in the number of deaths from cancer in 1936 compared with 1911 need qualification in view of the altered age constitution of the population since the earlier year. The number of people reaching the older ages at which cancer risks are greatest has more than doubled in the last twenty years, and it is only in the extreme old age groups from 60 onwards that the rate of mortality has definitely increased. For all groups up to age 60 there has been no increase in mortality rates since 1911. In the higher age groups no increase has been recorded in the female rate while the rate for males has shown only a slight increase. It is also probable that a proportion of the increased number of deaths recorded from cancer in recent years has been due to more correct diagnosis and certification on the part of medical practitioners rather than to any actual increase in the disease itself.

DEATHS FROM CANCER.—AGES, AUSTRALIA.

Ages.	1911.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15 years	21	8	29	24	15	39
15 years and under 20 ..	10	6	16	11	9	20
20 " " 25 ..	10	7	17	13	13	26
25 " " 30 ..	12	17	29	24	21	45
30 " " 35 ..	25	35	60	26	38	64
35 " " 40 ..	29	59	88	37	102	139
40 " " 45 ..	81	100	181	89	185	274
45 " " 50 ..	132	173	305	167	286	453
50 " " 55 ..	208	203	411	308	335	643
55 " " 60 ..	203	179	382	425	426	851
60 " " 65 ..	243	177	420	484	475	959
65 " " 70 ..	306	194	500	693	516	1,209
70 " " 75 ..	203	160	363	682	531	1,213
75 " " 80 ..	150	136	286	545	394	939
80 " " 85 ..	83	67	150	224	231	455
85 years and over ..	44	39	83	103	119	222
Unspecified	1	..	1	..	..	..
Total Deaths	1,761	1,560	3,321	3,855	3,696	7,551

(d) *Occupations.* A tabulation in summarized form of occupations of the males who died from cancer in 1921, 1931 and 1936, together with the percentage of each class on the total male deaths from this disease, is given hereunder:—

OCCUPATION OF MALES WHO DIED FROM CANCER.—AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1936.	1921.	1931.	1936.
				%	%	%
Professional	133	188	224	5.45	5.40	5.81
Domestic	76	97	102	3.11	2.78	2.64
Commercial	275	446	390	11.27	12.80	10.12
Transport and Communica- tion	212	295	326	8.69	8.47	8.46
Industrial	940	1,346	732	38.52	38.63	18.99
Agricultural, Pastoral, Mining, etc.	639	843	905	26.19	24.20	23.48
Indefinite	129	130	(a) 1,127	5.29	3.73	(a) 29.23
Dependent	36	139	49	1.48	3.99	1.27
Total Male Deaths	2,440	3,484	3,855	100.00	100.00	100.00

(a) Includes 340 (21.95 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

(c) *Death Rates.* The following table shows the death rates per 100,000 of mean population from cancer in each State for the years 1911 and 1936. The substantial increase in the death rate since 1911 is reflected in both sexes and in all States:—

DEATHS FROM CANCER.—RATES.(a)

State or Territory.	1911.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	77	71	74	102	106	104
Victoria	80	85	82	122	126	124
Queensland	71	56	64	110	87	99
South Australia	70	76	73	125	127	126
Western Australia	65	57	62	124	89	107
Tasmania	77	60	69	113	133	123
Northern Territory	37	..	30	140	59	114
Federal Capital Territory ..	99	..	56	..	..	..
Australia	75	72	74	112	111	111

(a) Number of deaths from cancer per 100,000 of mean population.

(f) *Proportion of Total Deaths.* While the death rate from all causes has diminished substantially in recent years, the rate from cancer has risen almost continuously, the result being that out of 10,000 deaths from all causes, 1,181 were due to cancer in 1936, as against 693 per 10,000 total deaths in 1911.

DEATHS FROM CANCER.—PROPORTIONS ON 10,000 DEATHS.

State or Territory.	1911.			1936.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	662	783	713	1,013	1,303	1,141
Victoria	637	819	719	1,112	1,339	1,218
Queensland	586	628	602	1,115	1,146	1,128
South Australia	675	828	745	1,239	1,494	1,356
Western Australia	557	700	605	1,130	1,161	1,142
Tasmania	723	629	680	1,001	1,414	1,186
Northern Territory	170	..	154	980	1,111	1,000
Federal Capital Territory ..	2,000	..	1,000	..	..	..
Australia	638	769	693	1,081	1,307	1,181

(g) *Comparison with Tuberculosis.* In recent years the death rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the periods under review the decline in the death rate from tuberculosis has been accompanied by an almost equal increase in the rate for cancer. Thus in the quinquennial averages shown below the death rate for tuberculosis declined by 44 while the rate for cancer increased by 42 per 100,000 persons. This equal but opposite tendency may be demonstrated by stating that the death rate from tuberculosis and cancer combined remains almost constant from period to period, the figures being :—1901–05, 152 per 100,000 ; 1906–10, 145 ; 1911–1915, 152 ; 1916–20, 154 ; 1921–25, 153 ; 1931–35, 150 ; and 1936, 153.

TUBERCULOSIS AND CANCER.—DEATH RATES(a)—AUSTRALIA.

Period.	Death Rate (a) from Tuberculosis.			Death Rate (a) from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901-05 ..	100	77	89	64	61	63
1906-10 ..	81	69	75	71	70	70
1911-15 ..	84	69	77	75	74	75
1916-20 ..	84	59	71	86	80	83
1921-25 ..	71	52	62	93	88	91
1931-35 ..	52	37	45	108	102	105
1936 ..	48	36	42	112	111	111

(a) Number of deaths per 100,000 of mean population.

(h) *Death Rates, Various Countries.* The following table shows the Australian death rate from cancer in comparison with that for other countries :—

CANCER.—DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt	1934	26	Australia	1935	109
Greece	1933	43	New Zealand	1935	112
Spain	1935	68	Irish Free State	1935	116
Japan	1934	70	Hungary	1935	119
Italy	1934	80	Czechoslovakia	1935	123
Finland	1933	80	Northern Ireland	1935	125
Ceylon	1933	83	Netherlands	1935	126
France	1933	96	Sweden	1932	130
Union of South Africa			Norway	1934	131
(Whites)	1934	98	Germany	1933	138
Poland (a)	1933	99	Denmark	1935	152
Canada (including			Great Britain and		
Quebec)	1933	100	Northern Ireland	1934	150
United States (Regis-			Scotland	1935	157
tration Area)	1934	106	Switzerland	1934	162
Belgium	1934	107	England and Wales	1935	166

(a) In towns with over 100,000 inhabitants.

(vii) *Diseases of the Heart* (38 to 43). The number of deaths in 1936 was 13,782 viz., 8,054 males and 5,728 females. Of these deaths, 47 were attributed to pericarditis, 178 to acute infective endocarditis, 12 to other acute endocarditis, 345 to aortic valve disease, 628 to mitral valve disease, 70 to aortic and mitral valve disease, 192 to endocarditis not returned as acute or chronic, 538 to other and unspecified valve disease, 162 to acute myocarditis, 113 to fatty heart, 5,558 to other myocardial degeneration, 2,063 to myocarditis not returned as acute or chronic, 1,001 to diseases of coronary arteries, 170 to angina pectoris with record of coronary disease, 432 to other angina pectoris, 117 to disordered action of the heart, 55 to cardiac dilatation (cause unspecified), and 843 to heart disease undefined. The sex and territorial distribution of the deaths will be found in the tables on pages 411 to 416. This class is the largest among causes of death, the death rate having grown from 1,019 per million in 1911-15 to 1,817 in 1931-35. The death rates and proportions per 10,000 deaths in 1936 were as follows :—

DEATH RATES^(a) FROM DISEASES OF THE HEART AND PROPORTION OF
10,000 TOTAL DEATHS, 1936.

State or Territory.	Death Rates ^(a) from Diseases of the Heart.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	251	185	218	2,486	2,271	2,391
Victoria	235	178	206	2,150	1,894	2,030
Queensland	195	130	164	1,971	1,725	1,870
South Australia	215	160	187	2,131	1,874	2,013
Western Australia	224	134	182	2,045	1,748	1,931
Tasmania	291	227	259	2,585	2,416	2,509
Northern Territory	280	..	190	1,961	..	1,667
Federal Capital Territory ..	96	67	72	1,481	1,765	1,591
 Australia	 235	 171	 203	 2,259	 2,025	 2,156

(a) Number of deaths from diseases of the heart per 100,000 of mean population.

(viii) *Diarrhoea and Enteritis (Children under two years of age)* (52). The number of deaths due to these causes was 358 in 1936 which compares favourably with an average of 409 for the previous five years. During 1936, 5,499 children died before reaching their second birthday, and of these 358, or 6.5 per cent., died from diarrhoea and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 404.

The number of deaths under 2 years of age, the death rates, and proportions of 10,000 deaths due to diarrhoea and enteritis for 1911-15, 1921-25, 1931-35 and 1936 are given in the following table. Reference to the last four lines of the table will reveal the very satisfactory decrease in the number of deaths due to these diseases. In view of changed birth-rates, however, the death-rates per 100,000 of mean population are not true measures of changes in the force of mortality. A better measure would be the estimated number of children in every 1,000 born who died from these diseases before reaching their second birthday. The numbers are estimated to be as follows:—

Period—	1911-15	Males, 24.6	Females, 20.9	Total, 22.8
"	1921-25	" 16.5	" 13.3	" 14.9
"	1931-35	" 3.7	" 2.8	" 3.3

DEATHS, DEATH RATES(*a*), ETC., DIARRHOEA AND ENTERITIS (UNDER 2 YEARS OF AGE).—AUSTRALIA, 1936.

State.	Number of Deaths from Diarrhoea and Enteritis. (Under 2 years of age.)			Death Rates (<i>a</i>) from Diarrhoea and Enteritis. (Under 2 years of age.)			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	81	69	150	6	5	6	59	64	62
Victoria ..	53	44	97	6	5	5	53	50	52
Queensland ..	31	21	52	6	5	5	61	60	61
South Australia..	12	6	18	4	2	3	41	24	33
Western Australia	23	13	36	10	6	8	88	80	85
Tasmania ..	4	1	5	3	1	2	30	9	21
Australia 1936 ..	204	154	358	6	5	5	57	54	56
Annual Average—									
1911-15 ..	1,687	1,354	3,041	68	59	64	569	627	593
1921-25 ..	1,114	859	1,973	38	31	35	362	366	364
1931-35 ..	234	175	409	7	5	6	70	68	69

(*a*) Number of deaths from these diseases per 100,000 of mean population.

(ix) *Puerperal Septicæmia* (including Post-Abortive Sepsis, but excluding Criminal Abortion) (68*a,c*). Mortality from puerperal septicæmia and post-abortion sepsis during 1936 was exceptionally heavy, the 211 deaths resulting being much higher than the numbers recorded in each of the previous five years. Figures prior to 1931 for these particular causes are not strictly comparable, as it is probable that some of the deaths now included under "Criminal Abortion" may have been classified with puerperal septicæmia in earlier years. The death rate per 1,000 live births during 1936 was 1.82, while the corresponding rates for the preceding five years were:—1931, 1.51; 1932, 1.40; 1933, 1.44; 1934, 1.46; and 1935, 1.32. The rate in 1936 per 1,000 live births of the 338 deaths from puerperal septicæmia, including criminal abortion, was 2.91. The 338 deaths mentioned were made up as follows:—Post-abortion sepsis 86, criminal abortion 127, puerperal septicæmia 125.

(x) *Other Diseases or Accidents of Pregnancy and Labour* (66, 67, 69, 70). The deaths under this heading numbered 375 in 1932; 339 in 1933; 374 in 1934; 345 in 1935; and 358 in 1936. Included in the 358 deaths in 1936 were the following:—Abortion not returned as septic, 20; ectopic gestation, 44; other accidents of pregnancy, 9; puerperal hæmorrhage, 79; puerperal albuminuria and convulsions, 90; other toxæmias of pregnancy, 26; phlegmasia alba dolens and thrombosis, 9; embolism or sudden death, 25; other accidents of childbirth, 51 (Caesarean section, 10; others 41); other or unspecified conditions of the puerperal state, 5.

(xi) *All Puerperal Causes* (66 to 70). The 696 deaths in 1936 under the two preceding headings, including criminal abortion, correspond to a death rate of 20.8 per 100,000 females or 43.9 per 100,000 women between the ages of 15 and 45 years. The rate is also equivalent to 6.00 deaths per 1,000 live births. The death rate may be expressed in other terms by stating that 1 of every 165 women confined in 1936 died from puerperal causes. The corresponding ratios for married women were 1 of every 181, and for single women 1 in every 58. More detailed information will be found in a series of tables in Bulletin No. 54 of Australian Demography.

The following table shows the death rate per 1,000 live births from puerperal causes in various countries. Care is needed in comparing the Australian rates with the figures

for other countries. In the rates for Australian States and the Commonwealth deaths from criminal abortion have been excluded from puerperal sepsis deaths but included with deaths from other puerperal causes and in the total. Definite information is not available as to the practice in other countries but it is very probable that the rates for the countries given hereunder totally exclude deaths from criminal abortion.

CHILDBIRTH.—DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.

Country.	Year.	Rates per 1,000 Live Births from—		
		Puerperal Sepsis.	Other Puerperal Causes.	All Puerperal Causes.
France	1931	0.94	1.75	2.69
Japan	1934	0.66	1.97	2.72
Italy	1934	1.06	1.67	2.73
Norway	1934	1.60	1.31	2.91
Netherlands	1934	1.02	2.16	3.18
Sweden	1932	1.70	1.74	3.44
Spain	1932	2.10	1.42	3.52
Western Australia	1935	1.11	2.72	3.82
Denmark	1930	1.18	2.65	3.83
England and Wales ^(b)	1935	1.61	2.32	3.93
Irish Free State	1935	1.25	2.83	4.08
Queensland	1935	0.96	3.17	4.13
Hungary	1935	2.35	1.82	4.17
Great Britain and Northern Ireland	1932	1.75	2.77	4.52
Switzerland	1934	1.36	3.19	4.55
Czechoslovakia	1935	2.79	1.83	4.62
Victoria	1935	0.97	3.73	4.70
Tasmania	1935	2.02	2.69	4.71
New Zealand	1935	2.43	2.42	4.85
Canada (including Quebec)	1934	1.90	3.37	5.27
Germany	1932	2.54	2.74	5.28
Australia	1935	1.32	3.98	5.30
Belgium	1934	2.00	3.39	5.39
Northern Ireland	1935	2.22	3.28	5.50
Greece	1932	2.95	2.65	5.60
South Australia	1935	1.57	4.36	5.93
United States (Registration Area)	1934	2.32	3.63	5.96
Union of South Africa (Whites)	1934	2.70	3.30	6.00
New South Wales	1935	1.61	4.70	6.31
Scotland	1935	2.58	3.73	6.31
Egypt ^(a)	1934	2.00	5.00	7.00

(a) Localities having Health Bureaus.

(b) Rate per 1,000 live and still births.

A tabulation of puerperal causes for Australia according to age at death for married and single women separately will also be found in Bulletin No. 54 of Australian Demography.

The total number of children left by the married mothers was 1,604, an average of 2.6 children per mother.

Thirty of the mothers who died had been married less than one year, 76 between one and two years, and 56 between two and three years. The duration of marriage ranged up to 38 years, apart from 4 cases in which the date of marriage was not stated. A tabulation distinguishing the ages at marriage will be found in Bulletin No. 54 of Australian Demography, which also includes a table showing in combination the duration of marriage and previous issue.

(xii) *Congenital Malformation, Debility and Premature Birth* (73 to 77). The deaths under this heading in 1936 numbered 3,303 of which 3,150 were of children under one year of age. Of all deaths of children under one year of age 66 per cent. was due to these causes. The number of deaths for 1936 is given in the following table :—

DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATION, 1936.

State or Territory.	Congenital Malformation.			Premature Birth and Injury at Birth.			Congenital Debility and other Diseases peculiar to Early Infancy.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	144	106	250	475	391	866	144	123	267
Victoria ..	111	75	186	241	170	411	118	94	212
Queensland ..	64	42	106	173	124	297	64	45	109
South Australia ..	35	22	57	60	55	115	26	18	44
Western Australia	16	16	32	77	56	133	39	19	58
Tasmania ..	17	12	29	50	39	89	18	20	38
Northern Territory	..	..	..	1	..	1	..	..	..
Federal Capital Territory ..	1	..	1	2	..	2	..	..	..
Australia ..	388	273	661	1,079	835	1,914	409	319	728
Number of deaths under one year	308	209	517	1,079	835	1,914	409	319	728
Number of deaths under one year per 1,000 births	5.19	3.69	4.45	18.17	14.73	16.49	6.89	5.63	6.27

(xiii) *Suicide* (79).—(a) *General*. The numbers of deaths from suicide showed an increase each year from 1922 until 1930 and then fell by 20 per cent. by 1932. The number of suicides rose slightly during 1933 and 1934 but decreased again during the next two years. The number of deaths in 1931 was 827—689 males and 138 females; in 1932, 754—598 males and 156 females; in 1933, 790—633 males and 157 females; in 1934, 826—643 males and 183 females; in 1935, 791—612 males and 179 females; and in 1936, 789—611 males and 178 females.

(b) *Modes Adopted*. The modes adopted by persons who committed suicide in the years 1931–35, 1935 and 1936 were as follows :—

SUICIDES, MODES ADOPTED.—AUSTRALIA.

Mode of Death.	Males.			Females.			Persons.		
	Average of 5 years, 1931–35.	1935.	1936.	Average of 5 years, 1931–35.	1935.	1936.	Average of 5 years, 1931–35.	1935.	1936.
Poisoning	139	147	118	67	82	75	206	229	193
Poisonous gas	39	44	43	20	13	35	59	57	78
Hanging or Strangulation ..	83	81	75	17	23	11	100	104	86
Drowning	46	34	32	28	28	24	74	62	56
Firearms	199	197	226	11	12	9	210	209	235
Cutting or piercing instruments	89	78	85	9	8	8	98	86	93
Jumping from a high place ..	15	10	15	6	6	5	21	16	20
Crushing	13	11	7	2	2	3	15	13	10
Other Modes	12	10	10	3	5	5	15	15	15
Total	635	612	611	163	179	178	798	791	789

(c) *Death Rates.* The death rates from suicide and the proportion per 10,000 of total deaths are given in the following table for 1936, corresponding rates for the periods 1911-15, 1921-25, 1931-35, 1933, 1934 and 1935 being shown at the foot of the table:—

SUICIDE.—DEATHS, DEATH RATES(a), AND PROPORTION OF TOTAL DEATHS, 1936.

State or Territory.	Number of Deaths.			Death Rates (a) from Suicide.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	217	74	291	16	6	11	159	69	119
Victoria ..	155	43	198	17	5	11	155	49	105
Queensland ..	112	26	138	22	6	14	221	74	161
South Australia ..	49	20	69	17	7	12	165	80	126
Western Australia	57	13	70	24	6	16	218	80	165
Tasmania ..	20	2	22	17	2	10	152	19	92
Northern Territory	1	..	1	28	..	19	196	..	167
Federal Capital Territory ..	..	..	..	..	..	..	..	..	..
Australia, 1936 ..	611	178	789	18	5	12	171	63	123
" 1935 ..	612	179	791	18	5	12	171	64	124
" 1934 ..	643	183	826	19	6	12	186	66	133
" 1933 ..	633	157	790	19	5	12	180	61	134
Average—1931-35	635	163	798	19	5	12	190	62	134
" 1921-25	509	112	621	18	4	11	166	48	114
" 1911-15	509	115	624	21	5	13	172	53	122

(a) Number of deaths from suicide per 100,000 of mean population.

(d) *Ages.* From the following table, which shows the ages of the persons who committed suicide in 1936, it will be seen that both extreme youth and extreme old age are represented:—

AGES OF PERSONS WHO COMMITTED SUICIDE.—AUSTRALIA, 1936.

Ages.	M.	F.	Total.	Ages.	M.	F.	Total
10 years and under 15	2	..	2	60 years and under 65	47	20	67
15 " " 20	18	7	25	65 " " 70	40	6	46
20 " " 25	29	12	41	70 " " 75	30	3	33
25 " " 30	51	20	71	75 " " 80	16	1	17
30 " " 35	54	14	68	80 " " 85	9	..	9
35 " " 40	57	16	73	85 " " 90	4	..	4
40 " " 45	69	18	87	90 " " 95	..	..	..
45 " " 50	73	24	97	95 " " 100	..	..	..
50 " " 55	66	24	90	Not stated	..	..	..
55 " " 60	46	13	59				
				Total Deaths ..	611	178	789

(e) *Occupations of Males.* The next table gives the occupations of the males who committed suicide in 1921, 1931 and 1936:—

OCCUPATIONS OF MALES WHO COMMITTED SUICIDE.—AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1936.	1921.	1931.	1936.
Professional	32	29	45	% 6.27	% 4.21	% 7.37
Domestic	20	22	17	3.92	3.19	2.78
Commercial	81	106	81	15.88	15.38	13.26
Transport and Communica- tion	42	52	53	8.24	7.55	8.67
Industrial	180	256	88	35.29	37.16	14.40
Agricultural, Pastoral, Min- ing, etc.	131	182	139	25.69	26.41	22.75
Indefinite	21	39	(u) 184	4.12	5.66	(a) 30.11
Dependent	3	3	4	0.59	0.44	0.66
Total Male Deaths .. .	510	689	611	100.00	100.00	100.00

(a) Includes 150 (21.55 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

(f) *Death Rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a fairly favourable position as regards the death rate from suicide:—

SUICIDE.—DEATHS PER 100,000 PERSONS LIVING. VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt	1934	2.9	New South Wales	1935	12.7
Irish Free State	1935	3.0	England and Wales .. .	1935	12.9
Northern Ireland	1935	4.0	Great Britain and Nor- thern Ireland	1934	13.0
Spain	1933	5.0	Queensland	1935	14.3
Greece	1934	6.0	United States	1934	14.9
Norway	1934	6.9	Western Australia	1935	15.0
Netherlands	1935	8.0	Sweden	1933	17.1
Canada	1934	8.5	Belgium	1934	18.0
Italy	1934	8.6	Denmark	1935	19.3
Victoria	1935	9.0	France	1933	20.0
Tasmania	1935	9.1	Japan	1934	21.3
Union of South Africa (a)	1934	9.3	Poland (b)	1933	24.0
Scotland	1935	9.5	Switzerland	1934	26.3
New Zealand	1935	10.0	Czechoslovakia	1935	27.3
South Australia	1935	10.1	Germany	1933	28.7
Australia	1935	11.8	Hungary	1935	31.0

(a) White population only.

(b) In towns with over 100,000 inhabitants.

(xiv) *Homicide* (80). Deaths from homicide in 1936 numbering 97 were fewer than in the previous year when 106 deaths occurred. The average for the five years 1931 to 1935 was 106. See paragraph (xvi).

(xv) *Accidental or Violent Deaths (except Suicide and Homicide).* Deaths from accidents in 1936 numbered 3,400 compared with an average of 3,087 for the previous five years. Of the deaths in 1936, 1,276 occurred in New South Wales; 875 in Victoria; 502 in Queensland; 279 in South Australia; 296 in Western Australia; 115 in Tasmania; 8 in Northern Territory; and 9 in the Federal Capital Territory. Other deaths of a violent nature numbered 209. See paragraph (xvi).

(xvi) *Accidental or Violent Deaths (including Homicide and Suicide).* The following table shows the various kinds of violent deaths, including homicides and suicides, recorded in Australia for the year 1936.

DEATHS FROM EXTERNAL VIOLENCE.—AUSTRALIA, 1936.

Cause of Death.	Males.	Females.	Persons.
Suicide (<i>see</i> paragraph (xiii))	611	178	789
Infanticide (murder of children under 1 year) ..	2	3	5
Homicide by firearms	23	8	31
Homicide by cutting or piercing instruments ..	6	10	16
Homicide by other means	33	12	45
Homicide, Total	61	33	97
Poisoning by venomous animals—			
(a) Snakebite	8	1	9
(b) Other	3	3	6
Poisoning by food	0	6	15
Accidental absorption of irrespirable or poisonous gas	11	5	16
Other acute accidental poisonings (gas excepted) ..	22	15	37
Conflagration	16	4	20
Accidental burns (conflagration excepted) ..	88	92	180
Accidental mechanical suffocation	22	13	35
Accidental drowning	271	57	328
Accidental injury by firearms	81	6	87
Accidental injury by cutting or piercing instruments	5	1	6
Accidental injury by falling, crushing, etc.—			
In mines and quarries	102	..	102
By machinery	64	2	66
Connected with methods of transport—			
Railways	130	22	152
Tramways	48	20	68
Automobiles	906	257	1,223
Other land vehicles	150	23	173
Transport by water	24	..	24
Transport by air	16	2	18
Fall not otherwise specified	208	217	485
Other crushings	90	3	93
Cataclysm	1	..	1
Injuries by animals (not poisoning)	23	3	26
Starvation, thirst, fatigue	6	..	6
Excessive cold	4	..	4
Excessive heat	21	10	31
Lightning	13	1	14
Other accidental electric shocks	23	4	27
Other and unstated forms of accidental violence—			
Inattention at birth	2	3	5
Other	100	43	143
Violent deaths of unstated nature (open verdict)—			
Drowning	70	22	92
Firearms	20	1	21
Cutting or piercing instrument	1	..	1
Fall	6	1	7
Crushing	7	2	9
Other	53	15	68
War wounds	7	..	7
Capital punishment	4	..	4
External Violence, excluding Suicide and Homicide	2,755	854	3,009
Total Deaths from External Violence ..	3,430	1,065	4,495

The following table of death rates per million of mean population reveals for External Violence (excluding Suicide and Homicide), which consists mainly of accidents, a decrease to 1921-25, but an increase in the rates for 1926-30 to which the growth of automobile accidents contributed very largely. A decreased death rate was recorded during the period 1931-1935, but the rate has been rising steadily since 1933.

DEATH RATES (a) ETC., EXTERNAL VIOLENCE.—AUSTRALIA.

Period.	Death Rates (a) from Homicide.			Death Rates (a) from External Violence excluding Suicide and Homicide.			Death Rates (a) from all External Violence.			All External Violence Proportion of 10,000 Deaths.
	Males.	Females	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	
1911-15 ..	21	16	19	948	268	621	1,170	330	770	718
1921-25 ..	17	13	15	753	211	487	950	260	610	643
1926-30 ..	19	15	17	843	240	549	1,070	300	690	746
1931-35 ..	21	11	16	714	223	472	923	284	609	676
1932 ..	19	9	14	700	220	464	898	277	593	685
1933 ..	18	11	15	678	214	449	883	273	583	654
1934 ..	21	11	16	738	234	490	949	301	630	676
1935 ..	21	11	16	764	243	507	964	308	641	677
1936 ..	19	10	14	802	255	533	999	318	663	703

(a) Number of deaths per 1,000,000 of mean population.

(xvii) "*Other Diseases.*" The intermediate and the abridged classifications of causes of death used in Tables A to E in the preceding pages differ from that used in the Official Year Books previous to No. 25 in that no residue of "other diseases" is shown at the foot. The items are ranged in classes or groups of classes and each class or group of classes is made complete by the addition of an "other diseases" item for that class or group of classes. These "other diseases" items of the intermediate classification are expanded into their constituent causes in the following table:—

F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1936.

Causes.		G.C.N. (a)	M.	F.	Total.
17. OTHER INFECTIOUS OR PARASITIC DISEASES.					
Erysipelas ..	..	15	42	36	78
Acute Poliomyelitis ..	..	16	12	9	21
Encephalitis Lethargica ..	..	17	12	9	21
Cerebrospinal Fever ..	..	18	5	5	10
Tetanus ..	..	22	59	20	79
Leprosy ..	..	33	1	2	3
Other Venereal Diseases ..	..	35	5	1	6
Mycoses ..	..	43	9	6	15
Mumps ..	..	44 ^a	4	10	14
Other ..	..	44 ^b	18	29	47
Total ..	..	..	167	127	294

(a) G.C.N. = General Classification Number.

F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1936—*continued*.

Causes.				G.C.N. (2)	M.	F.	Total
25. OTHER GENERAL DISEASES.							
Diseases of the Pituitary Gland	..	..	..	65	2	2	4
Diseases of the Thymus Gland	..	..	..	67	10	6	16
Diseases of the Adrenals (Addison's Disease)	..	..	..	68	15	13	28
Other General Diseases	..	..	..	69	10	11	21
Total	..	..	..	..	37	32	69
27. LEUCÆMIAS, ETC., AND OTHER DISEASES OF THE BLOOD AND BLOOD-MAKING ORGANS.							
Hæmorrhagic Conditions	..	..	..	70	26	19	45
Leucæmia, Lymphadenoma—							
Leucæmia	..	..	..	72 ^a	100	82	182
Aleucæmia (Lymphadenoma)	..	..	..	72 ^b	60	26	86
Diseases of the Spleen	..	..	..	73	16	15	31
Other Diseases of the Blood and Blood-forming Organs	..	..	..	74	3	10	13
Total	..	..	..	..	211	152	363
29. OTHER CHRONIC POISONINGS.							
Chronic Poisoning by Organic Substances	..	..	..	76	1	..	1
Chronic Poisoning by Mineral Substances—							
Chronic Lead Poisoning	..	..	..	77 ^a	6	4	10
Total	..	..	..	..	7	4	11
36. OTHER DISEASES OF NERVOUS SYSTEM.							
Encephalitis (not epidemic)—							
Cerebral Abscess	..	..	..	78 ^a	19	11	30
Others	..	..	..	78 ^b	37	23	60
Other Diseases of the Spinal Cord	..	..	..	81	95	81	176
Convulsions of Infants under Five years of Age	..	..	..	86	26	11	37
Other Diseases of the Nervous System—							
Chorea	..	..	..	87 ^a	..	3	3
Neuralgia and Neuritis	..	..	..	87 ^b	7	5	12
Paralysis Agitans	..	..	..	87 ^c	77	65	142
Disseminated Sclerosis	..	..	..	87 ^d	38	35	73
Idiocy, Imbecility	..	..	..	87 ^e	10	7	17
Other Diseases	..	..	..	87 ^f	31	35	66
Total	..	..	..	..	340	276	616
46. OTHER DISEASES OF THE CIRCULATORY SYSTEM.							
Other Diseases of the Arteries	..	..	..	99	51	28	79
Diseases of the Veins (Varices, Hæmorrhoids, Phlebitis, etc.)	..	..	..	100	19	24	43
Diseases of the Lymphatic System, Lymphangitis, etc.	..	..	..	101	9	9	18
Abnormalities of Blood Pressure	..	..	..	102	45	56	101
Other Diseases of the Circulatory System	..	..	..	103	5	9	14
Total	..	..	..	..	129	126	255

(a) G.C.N. = General Classification Number.

F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA. 1936—continued.

Causes.					G.C.N. (a)	M.	F.	Total.
50. OTHER DISEASES OF THE RESPIRATORY SYSTEM.								
Diseases of the Nasal Fossae and Annexa					104	12	8	20
Diseases of the Larynx					105	13	16	29
Congestion, Hæmorrhagic Infarction of Lung					111	205	222	427
Asthma					112	70	43	113
Pulmonary Emphysema					113	8	..	8
Other Diseases of the Respiratory System, Tuberculosis excepted—								
Chronic Interstitial Pneumonia					114 ^a	182	7	189
Gangrene of the Lung					114 ^b	6	3	9
Other Diseases					114 ^c	33	13	46
Total .. .. .					..	529	312	841
58. OTHER DISEASES OF THE DIGESTIVE SYSTEM.								
Diseases of the Buccal Cavity, Pharynx, etc.—								
Buccal Cavity and Annexa					115 ^a	15	14	29
Pharynx and Tonsils					115 ^b	66	63	129
Diseases of the Oesophagus					116	1	6	7
Other Diseases of the Stomach (Cancer excepted)					118	33	28	61
Other Diseases of the Intestines					123	47	38	85
Diseases of the Pancreas					128	33	29	62
Peritonitis (without specified cause)					129	50	50	106
Total .. .. .					..	251	228	479
70. PUERPERAL CAUSES.								
Phlegmasia Alba Dolens, Embolism, etc.—								
Phlegmasia Alba Dolens and Thrombosis					148 ^a	..	9	9
Embolism and Sudden Death					148 ^b	..	25	25
Other Accidents of Childbirth—								
Cæsarean Section					149 ^a	..	10	10
Other Surgical Operations and Instrumental Delivery					149 ^b	..	4	4
Others					149 ^c	..	37	37
Other or Not Specified Conditions of the Puerperal State—								
Puerperal Diseases of the Breast					150 ^a	..	2	2
Others					150 ^b	..	3	3
Total .. .. .					..	..	90	90

(a) G.C.N. = General Classification Number.

14. Causes of Deaths in Classes.—The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under eighteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the

following table, together with the death rates and proportions on total deaths pertaining to those classes. A further table furnishes the death rates for the quinquennia 1911-15, 1921-25 and 1931-35 :—

DEATHS, DEATH RATES(a), ETC., IN CLASSES.—AUSTRALIA, 1936.

Class.	Total Deaths.			Death Rates.(a)			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	2,758	2,104	4,862	80	63	72	774	741	761
2. Cancer and Other Tumours	4,058	3,942	8,000	118	118	118	1,138	1,394	1,251
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases	628	1,151	1,779	18	34	26	176	407	278
4. Diseases of the Blood and Blood-forming Organs	321	287	608	9	9	9	90	101	95
5. Chronic Poisonings and Intoxications	46	19	65	1	1	1	13	7	10
6. Diseases of the Nervous System and of the Organs of Sense	2,200	2,190	4,390	64	65	65	617	774	687
7. Diseases of the Circulatory System	9,927	7,614	17,541	289	228	259	2,785	2,092	2,744
8. Diseases of the Respiratory System	3,597	2,579	6,176	105	77	91	1,000	912	966
9. Diseases of the Digestive System	2,048	1,497	3,545	60	45	52	574	529	555
10. Diseases of the Genito-Urinary System and Annexa	2,841	2,044	4,885	83	61	72	797	723	764
11. Pregnancy, Labour and Puerperal State	..	696	696	..	21	10	..	246	109
12. Diseases of the Skin and of the Cellular Tissue	108	101	209	3	3	..	30	36	33
13. Diseases of the Bones and Organs of Locomotion	97	62	159	3	2	2	27	22	25
14. Congenital Malformations	358	273	631	11	8	10	109	66	105
15. Early Infancy	1,438	1,154	2,592	44	34	39	418	408	413
16. Old Age	1,481	1,103	2,584	43	42	43	415	400	451
17. External Causes	3,430	1,065	4,495	100	32	66	902	377	703
18. Causes of Death not Determined	235	100	335	7	3	5	66	36	52
Total	35,651	28,281	63,932	1,038	846	943	10,000	10,000	10,000

(a) Number of deaths per 100,000 of mean population.

QUINQUENNIAL DEATH RATES IN CLASSES.—AUSTRALIA.

Class.	Number of Deaths per 100,000 of Mean Population.								
	1911 to 1915.			1921 to 1925.			1931 to 1935.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	261	236	249	248	222	236	92	70	81
2. Cancer and Other Tumours							113	108	110
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases							18	33	25
4. Diseases of the Blood and Blood-forming Organs							9	9	9
5. Chronic Poisonings and Intoxications							2	..	1
6. Diseases of the Nervous System and of the Organs of Sense	112	93	103	93	83	88	66	67	..
7. Diseases of the Circulatory System	147	116	132	150	118	134	111	100	105
8. Diseases of the Respiratory System	132	95	113	121	86	105	101	75	88
9. Diseases of the Digestive System	135	123	130	97	81	89	60	46	53
10. Non-venereal Diseases of the Genito-Urinary System	72	46	59	72	49	61	81	59	70
11. Puerperal Condition	..	27	13	..	25	12	..	19	9
12. Diseases of Skin and Cellular Tissue	6	5	6	6	4	5	3	3	3
13. Diseases of Organs of Locomotion	2	1	1	3	2	2	3	1	2
14. Congenital Malformations	12	9	10	12	10	11	11	8	10
15. Early Infancy	87	71	79	73	56	65	44	34	39
16. Old Age	94	80	88	76	68	72	42	42	42
17. External Causes	117	33	77	95	26	61	92	28	61
18. Causes of Death not Determined	16	9	13	15	9	12	7	2	5
Total	1,193	942	1,073	1,061	841	953	993	804	900

15. Ages at Death of Married Males and Females, and Issue.—Bulletin No 54 of Australian Demography contains a number of tables showing, in combination with the issue, the ages at marriage, ages at death, birthplaces and occupations of married persons who died in Australia in 1936. A summary of those tables is given hereunder. Deaths of married males in 1936 numbered 22,830, and of married females, 20,490. The tabulations which follow deal, however, with only 22,460 males and 20,315 females, the information in the remaining 345 cases being incomplete. The total number of children in the families of the 22,460 males was 92,437, and of the 20,315 females, 90,598. The average number of children is shown for various age-groups in the following table:—

AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.—
AUSTRALIA.

Average Issue.

Age at Death.	Males.				Females.			
	1911.	1921.	1931.	1936.	1911.	1921.	1931.	1936.
Under 20 years ..	0.33	..	0.75	..	0.94	0.77	0.66	0.81
20 to 24 ..	0.77	0.84	0.81	0.66	1.27	1.22	1.13	1.08
25 " 29 ..	1.25	1.29	1.33	1.15	1.82	1.86	1.81	1.71
30 " 34 ..	2.05	2.00	1.79	1.73	2.74	2.45	2.34	2.15
35 " 39 ..	2.80	2.58	2.13	2.18	3.64	3.29	2.89	2.70
40 " 44 ..	3.47	3.23	2.77	2.55	4.09	3.66	3.29	3.12
45 " 49 ..	4.09	3.48	3.10	2.91	4.54	3.76	3.55	3.22
50 " 54 ..	4.75	3.76	3.46	3.06	5.35	4.23	3.00	3.53
55 " 59 ..	5.44	4.41	3.69	3.49	5.80	4.69	4.01	3.70
60 " 64 ..	5.95	4.98	4.02	3.75	5.99	5.39	4.21	4.13
65 " 69 ..	6.23	5.50	4.41	4.07	6.50	5.86	4.82	4.37
70 " 74 ..	6.41	6.06	5.06	4.54	6.38	6.30	5.41	4.95
75 " 79 ..	6.75	6.66	5.65	5.02	6.72	6.56	6.02	5.42
80 " 84 ..	6.68	6.89	6.17	5.59	6.22	6.76	6.26	5.78
85 " 89 ..	6.67	7.18	6.59	6.14	5.97	6.93	6.57	6.09
90 " 94 ..	6.03	7.21	6.94	6.63	5.69	6.53	6.73	6.76
95 " 99 ..	7.30	6.97	6.69	6.07	5.05	6.05	7.10	6.39
100 years and upwards ..	9.33	9.20	7.00	6.86	5.17	5.11	8.20	5.67
Age not stated ..	4.33	5.36	5.00	..	4.60	5.80	5.00	..
All Ages ..	5.42	4.97	4.44	4.12	5.35	5.05	4.72	4.40

The figures in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 240. The totals are shown in the following table:—

ISSUE OF DECEASED MARRIED MALES AND FEMALES.—AUSTRALIA, 1936.

Issue of Married Males.	Males.			Issue of Married Females.	Females.		
	Males.	Females.	Total.		Males.	Females.	Total
Living ..	38,725	37,776	76,501	Living ..	35,547	35,564	71,111
Dead ..	9,013	6,923	15,936	Dead ..	11,041	8,446	19,487
Total ..	47,738	44,699	92,437	Total ..	46,588	44,010	90,598

16. Ages at Marriage of Deceased Males and Females, and Issue.—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average

issue of males and females according to the age at marriage of the deceased parents shows a corresponding decrease in the averages as the age at marriage advances:—

AGES AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA.

Age at Marriage.	Average Issue.							
	Males.				Females.			
	1911.	1921.	1931.	1936.	1911.	1921.	1931.	1936.
Under 15 years ..	..	..	..	..	..	..	..	..
15 to 19 " ..	6.97	6.32	6.15	5.69	7.10	6.97	6.79	6.31
20 " 24 " ..	6.34	6.05	5.50	5.15	5.77	5.50	5.23	5.03
25 " 29 " ..	5.70	5.17	4.70	4.37	4.27	4.09	3.79	3.62
30 " 34 " ..	4.92	4.45	3.96	3.64	3.04	2.66	2.42	2.46
35 " 39 " ..	4.05	3.90	3.14	2.91	1.06	1.01	1.40	1.26
40 " 44 " ..	3.43	2.67	2.36	2.23	0.72	0.62	3.88	0.46
45 " 49 " ..	2.59	2.20	1.96	1.42	0.26	0.03	0.12	0.41
50 " 54 " ..	2.45	1.70	1.60	0.85	..	..	..	..
55 " 59 " ..	1.66	1.30	0.95	0.55	..	..	..	..
60 " 64 " ..	2.00	0.33	0.63	0.45	..	..	..	..
65 years and upwards ..	1.00	0.25	0.18	0.73	..	..	..	..
Age unspecified ..	5.40	4.93	3.64	3.32	5.23	5.41	3.96	3.60
All Ages ..	5.42	4.97	4.44	4.12	5.35	5.05	4.72	4.40

17. Birthplaces of Deceased Married Males and Females, and Issue.—The following table shows the birthplaces of married males and females who died in 1911 and 1936, together with the average issue. No generalizations can, of course, be made in those cases in which the number of deaths was small, but where the figures are comparatively large, as in the case of natives of Australia and the British Isles, differences occur between the averages of these individual countries which appear inexplicable on any other ground than that of different age constitution of the locally born population. It will be noted that the differences occur both in the male and female averages.

BIRTHPLACES OF DECEASED MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA.

Birthplace.	Married Males.				Married Females.			
	1911.		1936.		1911.		1936.	
	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.
Australasia—								
Australia ..	4,074	4.71	14,933	4.10	4,566	4.57	14,504	4.34
New Zealand ..	64	3.89	240	2.60	56	3.84	162	3.23
Europe—								
England and Wales ..	4,079	5.87	4,188	4.17	3,152	5.86	3,122	4.65
Scotland ..	1,133	5.89	1,031	4.09	1,002	6.09	814	4.73
Ireland ..	1,766	6.12	926	4.50	2,118	5.83	1,095	5.14
Other British Possessions ..	23	6.53	39	3.59	24	5.75	11	7.45
Western ..	199	4.33	228	4.07	55	5.07	83	5.17
Central ..	484	5.81	303	5.38	270	6.56	226	5.75
Southern ..	58	5.09	139	3.32	12	4.92	52	3.75
Eastern ..	35	4.37	53	3.72	6	4.50	21	3.38
Asia—								
British Possessions ..	32	3.87	63	2.92	17	6.41	34	4.26
Foreign Countries ..	74	2.40	86	3.12	5	2.60	18	4.61
Africa—								
British Possessions ..	16	3.56	22	2.77	15	4.80	23	4.13
Foreign Countries ..	..	..	5	4.00	..	..	1	10.00
America—								
British Possessions ..	42	5.55	48	3.56	17	6.47	17	2.53
United States ..	40	3.78	47	3.43	17	4.94	34	5.12
Other Foreign Countries ..	17	4.53	5	2.80	10	4.50	2	3.00
Polynesia ..	5	4.00	19	4.47	9	3.33	10	4.20
Indefinite ..	72	4.28	85	4.86	72	4.85	86	4.72
Total ..	12,213	5.42	22,460	4.12	11,423	5.35	20,315	4.46

18. Occupations of Deceased Married Males, and Issue. -The following tabulation shows the average issue in combination with the occupation of deceased males :—

OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUE.
AUSTRALIA.

Occupation Group.	Deaths of Married Males.			Average Issue.		
	1921.	1931.	1936.	1921.	1931.	1936.
Professional	926	1,194	1,620	4.04	3.78	3.42
Domestic	352	621	625	3.55	3.64	3.18
Commercial	1,977	2,962	2,525	4.18	3.55	3.38
Transport and Communication	1,254	1,742	2,108	4.63	4.15	3.90
Industrial	5,086	6,883	4,681	4.95	4.49	3.95
Agricultural, Pastoral, Mining, etc.	3,983	4,495	5,250	5.83	5.31	4.94
Indefinite	759	936	(a) 5,616	5.49	4.68	(a) 4.20
Dependent	15	39	35	4.00	3.85	3.80
Total	14,552	18,872	22,460	4.97	4.44	4.12

(a) Includes 4,211 clerks, labourers, etc. (average issue 4.13), not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

§ 4. Australian Life Tables.

The Official Year Book, No. 20, pp. 962 and 969 to 973, contained a synopsis of the various Australian Life Tables, also comparisons with other countries of the expectation of life at various ages. Considerations of space, however, do not permit of their repetition herein. The compilation of Joint Life Tables based on the age distribution of the population at the Census of the 30th June, 1933, is now in progress. In Official Year Book No. 20, pp. 928 to 942, will be found a specially contributed article by F. W. Barford, M.A., A.I.A. on the results of the tables for single lives completed to date. The detailed tables for single lives are now in course of printing and will be issued as a separate Census publication before the end of the current year.

§ 5. Registration of Births, Deaths and Marriages in the Territory for the Seat of Government.

Up to the end of 1929 the provisions of the Registration of Births, Deaths and Marriages Act of 1890 and the Marriage Act of 1890 of New South Wales applied to the Territory for the Seat of Government. Births, deaths and marriages occurring within the Territory were registered by the District Registrars at Queanbeyan and Nowra, and were incorporated in the New South Wales records.

Towards the end of 1929, however, the Registration of Births, Deaths and Marriages Ordinances were enacted, providing for the assumption by the Commonwealth Government of the function of registration within the Territory as from 1st January, 1930. The Commonwealth Statistician is the Principal Registrar, and all registrations are made at Canberra.

Marriages within the Territory are celebrated according to the conditions prescribed by the Marriage Ordinance, 1929. This Ordinance, which closely follows the provisions of the Marriage Act of New South Wales, which it supersedes as regards the Territory for the Seat of Government, came into operation on 1st January, 1930.

§ 6. Graphical Representation of Vital Statistics.

(See Graphs pp. 379 to 386.)

1. **General.**—The progressive fluctuations of the numbers of births, marriages and deaths are important indexes of the economic conditions and social ideals of a community. Graphs have accordingly been prepared which show these fluctuations. It should be remembered, however, that, normally, the increase of births and marriages should be proportional to the growth of population.

2. **Graphs of Annual Births, Marriages and Deaths.**—The outstanding features of the graph representing births are:—An almost continuous rise in the numbers from 1860 to 1891; a decline till 1898, associated with the commercial crises of 1891-93; a sharp fall in 1903 which accompanied a severe drought; an uninterrupted increase from 1903 to 1914, the total for 1914 being the highest recorded; a rapid decline to 1919, the result of war conditions, followed by an equally rapid increase in 1920. The numbers were fairly constant from 1920 to 1928 after which they declined steeply as the result of the world depression. A slight improvement was shown in 1935 and 1936.

The graph for marriages up to 1914 discloses approximately the same features as that for births—financial crises and droughts having a similar effect. The numbers for 1914 and 1915 showed a considerable increase over previous years. From 1916 to 1918 there was a rapid fall, the numbers being much below those of pre-war years. During 1919 and 1920 the recovery was very rapid, the total for the latter year being the highest ever recorded. Marriages declined again to 1923 then recovered to 1927, when the experience of the period 1915 to 1920 was repeated, the graph falling sharply with the progress of the depression and making a striking recovery in the past five years.

The characteristic feature of the graph of deaths is its irregular nature. On the whole, however, there is a fairly steady increase due to the growth of population.

3. **Graphs of Annual Birth, Marriage and Death Rates, and Rate of Natural Increase.**—The graph of the birth rate indicates a well marked decline throughout the whole period. This reduction of rate has been subject to fluctuations, there being two periods of arrested decline, viz., from 1877 to 1890, and from 1903 to 1912.

The variations in the marriage rates though less abrupt than those in the birth and death rates, have ranged from a minimum of 0.08 per 1,000 which marked the culmination of a commercial depression in 1894 to a maximum of 0.02 per 1,000 in 1920. The depression of 1931, however, was responsible for the establishment of a new minimum of 5.90 per 1,000 in that year. The next five years witnessed a sharp advance to 8.66 per thousand.

On the whole, the graph for the death rate furnishes clear evidence of a satisfactory decline during the period. The graph brings into prominence six years in which the rates were very high when compared with adjacent years, viz., 1860, 1866, 1875, 1884, 1898, and 1919. The high rate of 1919 was due to influenza, while in the other years epidemics of measles were largely responsible.

The graph of natural increase shows roughly the same variations as that for the birth rate, but the influence of the death rate is indicated by the very low rates of natural increase for 1875, 1898 and 1919, which resulted from the exceptionally high death rates of those years. The rate shows a rapid decline since 1922, although slight increases occurred during 1935 and 1936 due to improved birth rates in those years.

CHAPTER XV.

LOCAL GOVERNMENT.

§ 1. Introduction.

1. **General.**—The following statistics relating to Local Government are somewhat incomplete and otherwise unsatisfactory, but, hitherto, it has not been possible to obtain more complete information. A defect in the figures is due to inconsistency in some cases in the treatment of proceeds of loans and the expenditure thereof. These are sometimes included with the general revenue and expenditure and in other instances they are shown separately.

2. **Roads, Bridges, etc.**—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in New South Wales and South Australia, more especially in the large unincorporated areas, these duties are undertaken directly by the Government. In some States, moreover, a certain proportion of the roads and bridges is constructed and maintained by the Government, which, in addition, advances money for main roads to be expended by municipalities under the supervision of special Boards. Although roads, bridges and ferries constructed and maintained directly by Government do not properly come under the heading of "Local Government," they have been included in this chapter for the sake of convenience. Owing to the difficulty of obtaining complete particulars of receipts and expenditure by the various local governing bodies on roads under their control, the details of receipts and expenditure given in the following section are those of the Government only, relating either to the supervisory board or commission in the State or to direct activities of a department.

3. **Municipalities, Shires, etc.**—A description of the various systems of municipal government in the different States, and their development from the earliest date, was published in 1919 by the Commonwealth Bureau of Census and Statistics in a separate work entitled "Local Government in Australia."

4. **Water Supply and Sewerage.**—In the cities of Sydney and Melbourne the control of water supply and sewerage is in the hands of special Boards, while in Adelaide and Perth these services are under the direct supervision of Government Departments. In most of the other cities and towns, the municipal councils, or, in some cases, water trusts, are the controlling bodies which either construct the works out of their own resources or take them over after they have been constructed by the Government.

5. **Harbours.**—The majority of the harbours in Australia are managed by Boards, the members of which are either elected by persons interested or appointed by the Government. In a few instances, however, they are directly controlled by the Government. Only those which are controlled by Boards are dealt with in the following pages.

6. **Fire Brigades.**—In all the States, the management of fire brigades is undertaken by Boards. The members of these Boards are usually elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, together with one or more appointed by the Government, while occasionally volunteer or country fire brigades are represented.

§ 2. Roads, Bridges, Etc.

1. *New South Wales.*—(i) *General.* The control of all roads, bridges and ferries with the exception of those proclaimed as “National” and of those in the unincorporated areas of the Western Division, which still remained under its jurisdiction, was transferred by the Local Government Act of 1906 from the Roads Department to local authorities. Under the Act an annual endowment was made to municipalities and shires but owing to the inability of the councils to maintain the important roadways in a serviceable condition, this was discontinued and a separate vote made to councils for the upkeep of the main roads. This system was discontinued when legislation passed in 1924 created the Main Roads Board which functioned for seven years. In 1933 the main roads administration was organized as a separate department in the Ministry of Transport under the control of a commissioner who, with an assistant commissioner, was appointed for a term of seven years. In September, 1935, the “National” and other works, including those in the Western Division, were transferred to the control of the main Roads Department.

The Main Roads Department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organized system of main highways. In the metropolitan district, where a levy on councils is compulsory, the whole cost of construction and maintenance of main roads is paid from the funds of the Main Roads Department, but the actual work may be done by the councils. In the country districts assistance in respect of road works may be granted by the Department to the council of any area through which a main road passes, and the council may be required to contribute part of the cost of the work or, in special circumstances, the whole cost of any particular work may be paid from the roads funds or the cost may be advanced to be repaid by the councils. Funds for works on developmental roads were provided wholly by Parliamentary appropriation until 1933–34, when provision was made for the transfer annually of £135,000 from the Country Main Roads Fund. Local councils are required to maintain such roads in a satisfactory condition.

(ii) *Length of Roads and Bridges, and Ferries.* At the 30th June, 1934, the latest date for which particulars are available, the “National” works consisted of 61 bridges with a total length of 33,523 feet, and 5 ferries, while nearly in the unincorporated areas of the Western Division, under the control of the Main Roads Department, there were at 30th June, 1936, 7,351 miles of roads (of which 512 miles were metalled or ballasted, 1,157 formed only, and 3,370 cleared only). In June, 1934, there were 148 bridges of a total length of 10,601 feet, 1,000 culverts, 1,553 causeways and 5 hand punts. The latest statistics regarding the remaining roads of the State refer to the 30th June, 1939, at which date there were 110,045 miles of roads, streets and lanes in shires and 10,248 miles in municipalities. Of these, 9,037 miles were of concrete, tar, bitumen, waterbound macadam, or ballasted or metalled; 25,473 were gravelled; 22,802 formed only; 27,518 cleared only; and 37,403 natural surface.

(iii) *Expenditure on Roads, Bridges and Ferries.* The total expenditure by the Government during 1935–36 was £6,077,775, comprising expenditure from funds of the Main Roads Department £3,470,000 and endowments and grants to Councils from votes of the Local Government Department £3,007,165. The expenditure shown from the Main Roads Department Funds excludes £115,439 interest and loan repayment, £80,442 administrative expenses and £4,959 miscellaneous.

The Government expenditure in connexion with the Sydney Harbour Bridge, £1,786 in 1935–36 and £10,082,944 to the 30th June, 1939, is not included in the above figures. Of the total sum expended on the bridge to date, £8,400,831 was provided by General Loan Account, £1,065,444 from proceeds of municipal and shire rates and £10,669 from the Unemployment Relief Fund. Interest and exchange accounted for £1,535,071, and resump-tions for £1,352,129. A reduction in the total cost of the bridge will be effected by the sale of surplus resumed lands estimated at about £500,000.

2. *Victoria.*—(i) *General.* With the object of improving the main roads of the State the Country Roads Board was established by legislation passed in 1912. The principal duties of the board are to determine the main roads, to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance, and to recommend deviations to existing roads or the construction of new roads in order to facilitate communication or to improve the conditions of traffic.

(ii) *Length of Roads and Streets.* At the end of 1935 there were 106,444 miles of roads and streets in Victoria, comprising 150 miles wood or stone; 111 Portland cement concrete; 182 asphaltic-concrete and sheet asphalt; 6,230 tar or bitumen surface; 22,254 waterbound macadam, gravel, sand and hard loam pavements; 24,603 formed only; and 52,905 surveyed only but used for general traffic. Of the total length, only 2,306 miles or 2 per cent. were State highways.

(iii) *Receipts and Expenditure.* Funds created under the Act are the Country Roads Board Fund, the Loan Account and the Developmental Roads Loan Account. Particulars of the operations of these Funds are given hereunder.

(a) *Country Roads Board Fund.* All fees (other than fees for licences to drive motor cars) and fines under the Motor Car Act, and all registration fees and fines for traction engines, less cost of collection of such fees and fines, are credited to this fund. The total receipts for the year 1935-36 were £2,005,920 made up as follows:—Motor registration fees, £1,409,394; contributions by municipalities for permanent works and relief, £143,432, and for maintenance works, £147,073; sale of stores and material and hire of plant, £225,540; and other sources, £80,475. The expenditure for the year was £1,995,207, comprising maintenance and reconditioning of main roads and State highways, £985,280; plant, stores, administration, etc., £339,979; interest, sinking funds, etc., £579,467; and other expenses, £30,481. The expenditure shown for interest, sinking funds, etc., comprises the following items:—Interest and sinking fund payments on account of loan moneys, £310,847; repayments by municipalities for interest and sinking fund, £118,620; and relief to municipalities from liability in respect of interest and sinking fund, £150,000.

(b) *Country Roads Board Loan Account.* Loans to the amount of £4,922,000 have been authorized from time to time for permanent works on main roads and State highways under the Country Roads Acts. One half of the amount expended on permanent works and one third of the amount expended on maintenance of main roads must be refunded by the municipalities affected, 6 per cent. of the amount due in respect of permanent works being payable annually, and the cost of maintenance allocated to each municipality must be paid before the 1st of July in each year. A special rate, not exceeding 6d. in the pound, may be levied in any ward or riding of a municipality for the purpose of such repayment. During the year ended 30th June, 1936, the amounts paid into this Account were £35,595 from the State Loans Repayment Fund, while expenditure for the year on permanent works was £67,132, and the total to the end of the year, £4,859,151.

(c) *Developmental Roads Loan Account.* For the purpose of constructing and maintaining subsidiary or developmental roads, the Government has been authorized to borrow sums aggregating £6,475,000. The municipalities are required to bear a proportion of the interest on the outlay during the period of the loan and to maintain the roads when constructed. The amount expended during the year ended 30th June, 1936, was £19,154, and the total expenditure to that date was £6,418,319. Receipts for the year comprised £34,647 from the State Loans Repayment Fund.

(d) *Total Expenditure.* In addition to expenditure from the abovementioned Funds, the following amounts were expended under special appropriations on road construction and maintenance:—Unemployment relief, £703,849; contributions by the Commonwealth Government under the provisions of the Federal Aid Roads Act, £184,853, and special Commonwealth grant towards flood repairs, £33,270.

The total expenditure by the Board on road construction and maintenance during the year ended 30th June, 1936, amounting to £1,979,838, may be summarized as follows:—State Highways, £408,413; main roads, £835,208; developmental roads, £309,368; and unemployment relief (on main and developmental roads, etc.), £263,849.

3. **Queensland.**—Under the Main Roads Act 1920 a Main Roads Board was constituted, consisting of three members appointed by the Governor in Council. In 1925 the Board was abolished and its powers conferred upon a single Commissioner.

The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, tourist roads or tourist tracks, and, under certain circumstances, to undertake their construction and maintenance.

With the exception of State highways, mining access roads or tourist tracks, no road can be proclaimed until the Commission has considered any objections thereto lodged by interested local authorities.

Local authorities are not liable for the return of any expenditure for construction on State highways, mining access roads (serving only mining interests) or tourist tracks, or on arterial roads declared under the Federal Aid Roads Act. They are, however, responsible for up to 50 per cent. of maintenance of the former and 33½ per cent. of the latter roads. The liability in respect of main roads is 20 per cent. of construction costs; developmental roads 20 per cent. of interest on construction costs; secondary roads 50 per cent.; and tourist roads as agreed prior to commencement of work. The liability in respect of maintenance of State highways, main, developmental and secondary roads is 50 per cent. In the case of mining access roads and tourist tracks no repayment is required. The Commissioner has power to reduce the amount of contribution payable by any local authority in respect of permanent works and maintenance where the rate required to produce the annual repayment exceeds 1d. in the pound on the property valuation of the whole area. He has also power to grant relief in exceptional circumstances.

At the 31st December, 1935, there were under various local authorities 117,826 miles of roads in Queensland, of which 3,768 were natural or artificial sand-clay loam, 4,342 waterbound pavement, 539 waterbound pavement with bitumen surface, 681 bituminous penetration macadam, 45 concrete, 23,899 formed only and 84,552 unconstructed but used for general traffic. These totals include the roads under the control of the Main Roads Commission, which at the 30th June, 1936, totalled 12,375 miles comprising 9,010 miles of main roads, 2,754 of State highways and 611 of developmental, tourist, etc., roads.

During the year ended 30th June, 1936, the receipts of the Commission amounted to £1,838,335, including £400,000 from the Treasury Loan Fund, £40,485 from motor fees, £501,483 from the Commonwealth for works under the Federal Aid Roads Scheme and £139,017 from the State Unemployment Relief Scheme. Disbursements amounted to £1,862,799, including £1,067,490 on permanent works, and £213,732 on maintenance.

4. **South Australia.**—The Highways Act 1926 created a Commissioner of Highways and provided for a Main Roads Fund. The Commissioner is virtually empowered to determine upon which main roads he will spend the moneys available, in doing which he has to take into account (a) the moneys voted, or likely to be voted, by Parliament for main roads; (b) whether the road is or will be the main trunk route; (i) connecting any large producing area, or any area capable of becoming in the near future a large producing area, with its market or nearest port or railway station; (ii) connecting two or more large producing areas, or areas capable of becoming in the near future large producing areas, or between two or more large centres of population; (iv) between the capitals of this State and any other State; and (c) whether the area through which the road passes is, or in the near future will be, sufficiently served by a railway or railways.

The Main Roads Fund is to be credited with (a) licence fees and registration fees under the Road Traffic Act 1934; (b) fines, penalties and forfeitures in respect of convictions for offences against the same Act (exclusive of any sum received for costs); (c) fees for hawkers' licences; (d) contributions from Councils; (e) all sums appropriated by Parliament for main roads; (f) all loans raised and appropriated for main roads. In

accordance with legislation passed in the years 1930 to 1935 a considerable portion of these receipts is temporarily payable into general revenue. All moneys received by the State from the Commonwealth under the Federal Aid Roads Scheme are also expended by the Commissioner of Highways under the general provisions of the Highways Act.

The total length of roads in use for general traffic within local governing areas at the 31st December, 1935, was 51,742 miles, of which 14 miles were paved with wood or stone; 217 were bituminous concrete; 707 bitumen penetration; 14,072 tarpaved, metalled or gravelled; 6,267 formed only; and 30,465 unformed.

The expenditure from the Main Roads Fund for the year ended 30th June, 1936, was £334,017, including £125,713 for interest on loans; the amount received from the Commonwealth Government for expenditure on Federal Aid Roads was £309,003; the amount allocated for roads in newly settled areas, etc., was £32,470; and grants in aid of rates collected paid to Councils amounted to £27,000. In sparsely-settled districts outside the incorporated areas, the roads and bridges are constructed and maintained by the Engineering and Water Supply Department under arrangement with the Commissioner of Highways. The amount so expended during the same period was £9,553. At the close of the period under review the Commissioner was maintaining departmentally about 984 miles of improved main roads.

5. Western Australia.—In Western Australia the construction, maintenance and management of main and developmental roads throughout the State are under the control of the Commissioner of Main Roads, appointed under the Main Roads Act 1930. Minor roads are controlled by Municipalities and District Road Boards.

6. Tasmania.—(i) *Length and Description of Roads.* At the 30th June, 1936, there were 12,813 miles of roads in Tasmania, comprising 462 of concrete, bitumen or oil-sprayed; 5,150 metalled; 3,135 gravelled; and 4,066 formed only. Of the total length, 1,222 miles were State highways.

(ii) *Construction.* In Tasmania the cost of construction of roads and bridges is borne almost entirely by the State Government. Up to the 30th June, 1936, the loan expenditure on these works was £5,278,753 (roads, £4,315,756; tracks, £233,309; bridges, £720,688). In addition, half the proceeds of the sale of land has been applied to form a Crown Lands Fund for the construction of roads to new holdings. Under this provision £603,008 has been expended. This fund has in recent years more than met the demands on it, and expenditure therefrom since 1918 has been limited to £10,000 annually, the balance being used for redemption of debt.

Loan money expended by the Public Works Department during the year 1935-36 on the construction of roads and bridges amounted to £82,773, and expenditure from the Crown Lands Fund to £2,226. In addition, the sum of £162,677 provided by the Commonwealth Government was expended on roads. New-road mileage completed during the year was 122 miles metalled and gravelled under State votes, and 18 miles of new construction and 90 miles of reconstruction under Federal Aid Roads Scheme.

(iii) *Maintenance.* The maintenance of roads, other than State highways, is undertaken by the municipalities out of their own revenues. All bridges costing over £50 are maintained by the State Government. The maintenance of State highways is provided for by the State Highways Act 1920, which created the State Highways Trust Fund to which is paid from Consolidated Revenue a sum equal to the amount of all motor taxes collected in the immediately preceding financial year and paid into the Treasury, less 2 per cent. The expenditure on State highways for 1935-36 was £36,181.

7. Summary of Net Loan Expenditure on Roads and Bridges.—Figures showing the total expenditure on roads and bridges in the States are not available. The following table shows the annual net loan expenditure on roads and bridges by the central Governments in each State during the years 1931-32 to 1935-36, together with the aggregate amounts of expenditure up to the 30th June, 1936. The net loan expenditure by the Government is not available for Tasmania and the figures given in the following table represent the actual amounts expended by the Department of Public Works, including sums for unemployment relief.

ROADS AND BRIDGES.—NET LOAN EXPENDITURE.

Year ended 30th June—	N.S.W.	Victoria.(a)	Q'land.	S. Aust.(b)	W. Aust.	Tasmania.	All States.
	£	£	£	£	£	£	£
1932 ..	1,277,072	68,917	90,642	25,955	..	27,040	1,489,626
1933 ..	233,504	94,088	83,125	..	83,004	51,336	545,057
1934 ..	Cr. 37,927	114,419	210,700	..	123,814	63,240	474,246
1935 ..	262,436	95,300	689,091	..	185,973	65,960	1,298,820
1936 ..	92,682	77,044	275,110	..	132,783	82,773	660,392
Total to 30/6/36	16,756,428	12,237,256	3,638,442	3,219,745	3,278,503	5,278,753	44,409,127

(a) Represents expenditure from loan and on account of loan.
credits due to purchase of securities.

(b) Adjusted figures, excluding

The loan expenditure given above does not represent the total expenditure on roads and bridges. It relates for the most part to capital expenditure on new works, but it must be supplemented by similar expenditure from loan funds of local bodies, Federal grants and unemployment relief moneys, and further account must be taken of expenditure on maintenance which is mainly defrayed from the current revenues.

§ 3. Municipalities, Shires, Etc.

1. New South Wales.—(i) *General.* Practically the whole of the State, with the exception of the greater portion of the Western Division, has been divided into municipalities and shires, the total area incorporated at the end of 1935 being 184,010 square miles, of which 2,141 square miles are included in the former and 181,869 in the latter. The areas incorporated comprise the whole of the Eastern and Central Divisions of the State (with the exception of Lord Howe Island, the islands in Port Jackson and the quarantine station at Port Jackson) and a small portion of the Western Division consisting of the whole of six and part of two municipalities.

The operations of the City of Sydney are governed by the Sydney Corporation Act, 1932-1934, and those of other local government areas known as municipalities and shires by the Local Government Act, 1919 and amendments.

In the tables which follow the revenue and expenditure transactions of the City of Sydney are shown separately from those of municipalities and shires because of differences in the form of accounts. An exception is made, however, in the summary appearing on page 458, total figures for New South Wales including both the City of Sydney and municipalities and shires.

LOCAL GOVERNMENT AREAS, NEW SOUTH WALES.—SUMMARY, 1935.

Local Area.	Number.	Area.	Population, 31st December, 1935.	Unimproved Capital Value. (a)	Improved Capital Value. (a)	Length of Roads.(c)
		Acres.		£	£	Miles.
Metropolitan—						
City of Sydney	1	3,220	87,570	45,891,051	139,586,700	137
Municipalities	48	151,444	1,158,500	90,946,422	271,062,229	3,374
Total	49	154,664	1,246,130	136,837,473	410,648,929	3,511
Country—						
Municipalities	124	1,215,676	576,020	30,216,525	102,543,725	6,737
Shires	139	116,396,340	811,210	139,018,142	(b)	110,945
Total	263	117,612,016	1,387,230	169,234,667	(b)	117,682
Grand Total	312	117,766,680	2,633,360	306,072,140	(b)	121,193

(a) Excludes Federal Government and other non-rateable properties.
(c) Figures for year 1936.

(b) Not available

(ii) *Revenue and Expenditure.*—(a) *City of Sydney.* Revenue from rates and from fines, fees, rents, etc., in connexion with ordinary local services rendered by the City Council are credited to the City Fund, of which the Public Markets Account and Resumptions Account are subsidiary accounts. Expenditures on road maintenance, parks and recreation, health, street lighting and other services are made from the City Fund. In addition, the Council finances comprise an Electricity Trading Fund, an Insurance Fund, and, though not usually treated as forming part of the City's accounts, rates levied to meet contributions payable to authorities controlling the main roads and Sydney Harbour Bridge.

A statement of the revenue and expenditure of the City of Sydney for the year ended 31st December, 1935, is shown below :—

CITY OF SYDNEY.—REVENUE AND EXPENDITURE, 1935.

Particulars.	City Fund.			Total.
	Public Markets.	Resump-tions.	Other.	
Revenue—	£	£	£	£
Rates (contributions in lieu and rent of mains) .. .. .	..	..	878,500	878,500
Rents and hire	70,949	96,590	11,357	178,896
Licences, fines, fees, etc.	59,212	..	52,133	111,345
Sundries	178	..	51,864	52,042
Total City Funds	130,339	96,590	993,854	1,220,783
Electricity Works Fund .. .. .	..	..	..	2,539,189
Insurance Fund .. .. .	..	..	..	31,436
Main roads and harbour bridge rates .. .. .	..	..	..	104,951
Total Revenue .. .. .	..	..	..	3,896,359
Expenditure—				
Administration .. .. .	..	..	} 492,881	613,994
Works, Services, etc.	63,359	57,754		
Interest	53,141	316,398		
Loan Redemption, Sinking Funds, etc.	24,065	71,817	41,593	137,475
Total City Funds	140,565	445,969	643,885	1,230,419
Electricity Works Fund .. .. .	..	..	..	2,467,000
Insurance Fund .. .. .	..	..	..	11,015
Main roads and harbour bridge (rate) contributions .. .. .	..	..	..	104,951
Total Expenditure .. .. .	..	..	..	3,813,464

Loan expenditure by the City of Sydney during 1935 amounted to £558,074.

(b) *Municipalities and Shires.* In the accounts of municipalities and shires operating under the Local Government Act, 1919, expenditure chargeable to revenue includes, in addition to normal recurring items of expenditure, cost incurred in respect of construction works, such as roads and bridges, and other objects having long life not being realizable assets or for use in performing works or rendering services over a period of time even though financed from loan funds. It excludes payments made in the redemption of indebtedness.

A summary of the revenue accounts of municipalities and shires for 1935, compiled on the foregoing basis, is shown in the following table:—

MUNICIPALITIES AND SHIRES (EXCLUDING CITY OF SYDNEY), NEW SOUTH WALES.—REVENUE AND EXPENDITURE, 1935.

Particulars.	Municipalities.		Shires.	Total.
	Metropolitan.	Country.		
REVENUE.				
	£	£	£	£
Ordinary Services—				
Rates and extra charges	2,013,371	763,931	1,282,465	4,059,767
Government endowment .. .. .	..	..	149,250	149,250
Government grants	1,103,255	1,147,357	2,427,984	4,678,596
Works	123,635	41,342	66,713	231,690
Health	169,468	219,363	135,241	524,072
Services	36,217	44,004	12,957	93,178
Property	29,012	60,059	36,978	126,049
Other	37,272	26,366	19,011	82,649
Total Ordinary Services	3,512,230	2,302,422	4,130,599	9,945,251
Trading Undertakings	95,167	1,205,319	273,244	1,573,730
Water and Sewerage Funds .. .. .	..	522,478	39,212	561,690
Total Revenue	3,607,397	4,030,219	4,443,055	12,080,671
EXPENDITURE CHARGEABLE TO REVENUE.				
Ordinary Services—				
Administration	168,236	132,810	224,353	525,399
Works	1,765,077	1,312,533	3,412,491	6,490,101
Health	580,445	395,217	169,768	1,145,430
Services	239,467	211,461	122,494	573,422
Property	44,082	35,015	17,564	96,661
Interest	242,009	65,933	72,362	380,304
Other	18,957	14,939	33,860	67,756
Main Roads Board and Harbour Bridge Contribution	193,617	7,282	24,554	225,453
Total Ordinary Services	3,251,890	2,175,190	4,077,446	9,504,526
Trading Undertakings	78,986	1,048,702	227,750	1,355,438
Water and Sewerage Funds .. .. .	..	341,165	26,706	367,871
Total Expenditure	3,330,876	3,565,057	4,331,902	11,227,835

The total amount of Government assistance to municipalities in 1935 amounted to £2,355,510 and to shires £2,579,062, the latter including £149,250 by way of endowment in aid of general revenues. Apart from the sums shown under Government grants and endowment small amounts were credited under other heads, including trading and water and sewerage accounts. A complete statement of revenue from rating, which in the foregoing table is allotted to the various accounts, is presented in a later table.

(iii) *Capital Transactions.* The following table shows the capital expenditure, debt redemptions and loan expenditure of Councils during 1935 :—

MUNICIPALITIES AND SHIRES (EXCLUDING CITY OF SYDNEY), NEW SOUTH WALES.—CAPITAL TRANSACTIONS.

Particulars.	Municipalities.		Shires.	Total.
	Metropolitan.	Country.		
	£	£	£	£
Assets purchased	150,240	585,620	207,964	943,824
Loan repayments	403,358	194,530	113,937	711,825
Payments off deferred payment debts ..	48,935	112,935	72,239	233,209
Expenditure from Loan Funds ..	123,320	22,034	18,186	163,540
Balances owing on deferred payment debts incurred during year ..	130,139	271,343	127,234	528,716

(iv) *Rates Levied—City of Sydney, Municipalities and Shires.* Rates levied by local authorities may be of four kinds, viz., general, special, local and loan. In the following table are shown particulars of all rates levied during 1935 :—

CITY OF SYDNEY, MUNICIPALITIES AND SHIRES, NEW SOUTH WALES. RATES LEVIED, 1935.

Area.	Rates levied on behalf of—						Extra Charges on Overdue Rates.
	Ordinary Services.(a)	Electricity Works.	Gas Works.	Water Supply.	Sewerage.	Total.	
	£	£	£	£	£	£	£
Metropolitan—							
Sydney	980,940	..	..	..	..	980,940	2,511
Municipalities ..	1,962,116	1,872	..	..	..	1,963,988	51,255
Total	2,943,056	1,872	..	..	..	2,944,928	53,766
Country—							
Municipalities ..	730,691	24,022	2,292	224,036	100,280	1,081,321	33,240
Shires	1,244,374	25,260	..	24,792	..	1,294,426	38,091
Total	1,975,065	49,282	2,292	248,828	100,280	2,375,747	71,331
Grand Total	4,918,121	51,154	2,292	248,828	100,280	5,320,675	125,097

(a) Including Main Roads and Harbour Bridge Rates.

(v) *Assets and Liabilities—City of Sydney, Municipalities and Shires.* A statement of the assets and liabilities as at 31st December, 1935, of local authorities in New South Wales is shown below:—

CITY OF SYDNEY, MUNICIPALITIES AND SHIRES, NEW SOUTH WALES.—ASSETS AND LIABILITIES, 1935.

Municipalities.					
Particulars.	City of Sydney.			Shires.	Total.
		Metropolitan.	Country.		
ASSETS.					
	£	£	£	£	£
Bank balances and cash	922,191	324,415	895,301	468,823	2,610,730
Outstanding rates and extra charges	615,274	996,476	707,281	841,730	4,227,145
Sundry debtors					
Stores and materials	22,712,551	292,065	518,857	255,462	36,989,051
Land, buildings, plant and furniture					
Other	6,480,780	48,003	145,073	74,873	
		2,310,520	9,468,287	2,229,141	
		3,052	80,458	88,823	6,653,113
Total Assets	30,730,796	3,974,531	11,815,857	3,958,855	50,480,039
LIABILITIES.					
Loans, interest accrued and sundry creditors	26,650,567	5,001,542	2,313,394	1,339,122	35,304,625
Debts due to Government and interest accrued	..	454,690	4,741,263	761,931	5,957,884
Bank overdraft	768,172	600,026	368,000	418,011	2,164,118
Other	..	80,435	222,568	240,110	543,113
Total Liabilities	27,418,739	6,146,593	7,645,234	2,759,174	43,969,740

In the City of Sydney it is not possible to dissect capital expenditure on resumptions to show the cost of resumptions used in roadworks and those portions retained as assets in the form of land and buildings: in all other instances capital expenditure on road and bridge construction has not been included as an asset.

(vi) *Loan Expenditure—Municipalities, Shires and County Councils.* The total loan expenditure by local government bodies during the year 1935 was £7,118,834, comprising municipalities £703,426 (City of Sydney, £558,072; metropolitan, £123,320; and country, £22,034); shires, £18,186; and county councils, £20,222.

2. *Victoria.*—(i) *General.* Local Government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

The financial years of the cities of Melbourne and Geelong end on the 31st December and the 31st August respectively, and those of all other municipalities on the 30th September.

(ii) *Municipalities. (a) Summary.* The following table shows the number of cities, towns, boroughs and shires, with estimated population, number of ratepayers and dwellings, and value of rateable property for the year 1935 :—

MUNICIPALITIES, VICTORIA. SUMMARY.

Year ended 30th September—	Number of Municipal- ities.	Population.	Number of Distinct Ratepayers.	Occupied Dwellings.	Estimated Value of Rateable Property.	
					Capital Improved Value.	Net Annual Value.
CITIES, TOWNS AND BOROUGHS.						
1935	No. 57	No. 1,202,150	No. 366,331	No. 299,618	£ 353,914,980	£ 19,021,105

SHIRES.

1935	No. 138	No. 639,150	No. 246,400	No. 159,530	£ 248,646,420	£ 12,441,578
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(b) *Revenue and Expenditure.* The table hereunder shows the revenue from various sources, and the expenditure under various heads, of municipalities during the year 1935 :—

MUNICIPALITIES, VICTORIA.—REVENUE AND EXPENDITURE, 1935.

Items.	Revenue.	Items.	Expenditure from Revenue.
	£		£
Taxation—		Salaries, etc.	378,575
Rates—		Sanitary work, street cleaning, etc.	365,457
General	3,308,136	Health	148,342
Other	49,563	Lighting	169,572
Licences	19,745	Contributions to Fire Brigades ..	62,593
Sanitary Charges	149,136	Public Works—	
Dog fees	33,795	Roads, Streets and Bridges—	
Government grants	142,962	Construction	180,134
Licensing fund payments	60,157	Maintenance	1,288,323
Contributions for streets, etc. ..	308,481	Other	518,435
Market and weighbridge dues ..	122,188	Payments to Country Roads Board ..	294,048
Rents	140,824	Formation of private streets, etc. ..	84,660
Electric light and gas works ..	1,514,968	Electric light and gas works	1,110,199
Interest	104,083	Redemption of loans	485,145
Other sources	555,575	Payments to sinking funds	74,861
		Interest on loans	600,089
		Interest on bank overdrafts	41,940
		Charities	40,118
		Other expenditure	518,278
Total Revenue	6,509,613	Total from Revenue	6,360,769

MUNICIPALITIES, VICTORIA.—LOANS - RECEIPTS AND EXPENDITURE, 1935.

Items.	Receipts.	Items.	Expenditure.
	£		£
Proceeds of loans—		Roads and bridges ..	235,397
From Government ..	75,397	Water and irrigation ..	1,196
From other sources ..	439,987	Sewerage and drainage ..	32,300
Other receipts ..	159,661	Electric light and gas ..	213,842
		Public buildings ..	163,225
		Other purposes ..	20,992
Total Receipts ..	675,045	Total Expenditure ..	666,952

(c) *Assets and Liabilities.* The assets of municipalities may be classified under three heads—(a) the municipal fund, (b) the loan fund and (c) property; the liabilities under two heads—(a) the municipal fund, and (b) the loan fund. The following table shows the amount of municipal assets and liabilities at the end of the year 1935 :—

MUNICIPALITIES, VICTORIA.—ASSETS AND LIABILITIES, 1935.

Items.	Assets.	Items.	Liabilities.
	£		£
MUNICIPAL FUND—		MUNICIPAL FUND—	
Uncollected rates ..	1,057,770	Due on current contracts ..	96,671
Streets formed, etc., payments outstanding ..	1,166,749	Overdue interest ..	10,813
Rents and interest outstanding ..	119,654	Bank overdrafts ..	759,804
Cash in hand or in bank ..	692,071	Payments due to Country Roads Board ..	411,880
Other assets ..	500,418	Other liabilities ..	654,935
LOAN FUND—		LOAN FUND—	
Sinking funds—		Loans outstanding—	
Amount at credit ..	721,973	Due to Government—	
Due by other bodies ..	11,203	Country Roads Board ..	
Unexpended balances ..	649,581	Loans ..	1,822,620
PROPERTY—		Other ..	911,139
Buildings, markets, tramways, etc. ..	5,917,130	Due to Public ..	11,863,315
Waterworks ..	379,080	Due on loan contracts ..	89,755
Gasworks ..	257,880		
Electric light works ..	2,742,490		
Plant and machinery ..	600,920		
Other assets ..	236,950		
Total ..	15,060,469	Total ..	16,620,938

3. *Queensland.*—(i) *General.* The whole of the State (except islands along the coast and 606 square miles in area) is incorporated into cities, towns and shires under the Local Authorities Act of 1902 and its amendments.

(ii) *Municipalities.*—(a) *Summary.* The following table gives particulars of the area, population, number of inhabited dwellings, and assets and liabilities of cities and towns and of shires for the year 1935, except for the City of Brisbane for which financial particulars relate throughout to the year ended 30th June, 1936 :—

MUNICIPALITIES, QUEENSLAND.—SUMMARY.

Year.	No.	Area.	Popula- tion.	Occupied Dwellings.	Rateable Value.	Assets.	Liabilities.	
							Govern- ment Loans.	Total
CITIES AND TOWNS.								
1935(a)	23	sq. miles. 780	No. (b)	No. 122,369	£ 28,938,835	£ 24,951,193	£ 6,946,721	£ 26,819,089
SHIRES.								
1935(a)	121	669,054	(b)	105,732	43,482,034	2,295,510	2,429,513	3,288,089

(a) Figures relating to assets and liabilities include waterworks, sewerage works, electric light works, and railways and tramways controlled by local authorities. (b) The estimated population of Queensland at the 31st December, 1935, was 970,719 persons.

(b) *Revenue and Expenditure.* The revenue and expenditure (including loan moneys) of cities and towns, and of shires for the year 1935 are given hereunder :—

MUNICIPALITIES, QUEENSLAND. REVENUE AND EXPENDITURE.

Year.	Revenue.			Expenditure.			
	Rates.	Govern- ment Loans and Subsidies. (a)	Total.	Public Works and Services. (b)	Govern- ment Loan Redemp- tion.	Office Expenses and Salaries.	Total.
CITIES AND TOWNS.							
1935	£ 1,392,701	£ 1,265,704	£ 6,550,471	£ 4,086,250	£ 237,342	£ 304,683	£ 6,650,040
SHIRES.							
1935	989,246	1,613,779	2,959,118	2,397,059	95,145	138,179	2,947,583

(a) Includes Main Road Receipts.

(b) Includes Expenditure on Main Roads.

The figures in the foregoing tables cover all the activities of the local authorities throughout Queensland such as:—Road repairs, street lighting, etc., waterworks, electric light, and railways and tramways controlled by local bodies.

4. *South Australia.*—(i) *General.* The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns, and district councils in the agricultural areas. With the exception of the Corporation of Adelaide, grants are allocated to these bodies by the Commissioner of Highways for the maintenance and construction of main and other roads.

(ii) *Local Authorities.*—(a) *Summary.* The number of corporations and district councils was reduced by amalgamation by the Local Government Commission in 1936, from 166 to 142, of which 14 corporations and 7 district councils are in the metropolitan area, and 20 corporations and 101 district councils in outside areas. The

following table gives the area, population, number of occupied dwellings, capital and assessment values and outstanding loans for corporations and district councils separately for the year 1935 :—

LOCAL AUTHORITIES, SOUTH AUSTRALIA.—SUMMARY.

Year.	Area.	Population.	Occupied Dwellings.	Capital Value.	Assessment Value.	Out-standing Loans
MUNICIPAL CORPORATIONS.						
	Acres.	No.	No.	£	£	£
1935	79,907	306,456	75,988	86,488,432	4,323,822	718,641
DISTRICT COUNCILS.						
1935	34,426,803	267,081	63,232	83,526,153	4,185,911 (a)	361,143

(a) Includes advances through District Councils to settlers for vermin-proof fencing, etc., amounting to £279,745.

(b) *Revenue and Expenditure.* The next table gives the revenue and expenditure of corporations and district councils showing in separate columns the receipts and expenditure on main roads. The figures differ slightly from those shown in the Summary Table in § 4 hereinafter, which exclude transfers between the Government Grants and General Accounts. In order to bring the financial transactions of both municipal corporations and district councils to a common year, the particulars for the former are for seven months only of the year ended June, 1935.

LOCAL AUTHORITIES, SOUTH AUSTRALIA.—REVENUE AND EXPENDITURE

Local Government (exclusive of Government Grants Account).							Government Grants Account (Main Roads).	
Year.	Revenue (including Loans).			Expenditure.			Revenue.	Expenditure
	Rates.	Subsidies.	Total.	Roads.	Other Public Works and Services.	Total.		
MUNICIPAL CORPORATIONS.								
1935 (7 months)	£ 317,300	£ 17,051	£ 465,091	£ 164,622	£ 154,135	£ 448,403	£ 12,739	£ 12,289
DISTRICT COUNCILS.								
1935 ..	287,580	27,061	436,055	217,630	81,604	416,761	238,309	237,283

* 5. *Western Australia.*—(i) *General.* In this State Local Government is carried on by means of (a) municipalities and (b) district road boards. Certain functions are delegated to health boards, the personnel of which, in most cases, coincides with those of the municipalities and district road boards.

The financial year of municipalities and municipal boards of health terminates on the 31st October, and that of road boards and other local boards of health on the 30th June.

(ii) *Municipalities. (a) Summary.* The following table gives various particulars regarding municipalities for the year ended 31st October, 1935 :—

MUNICIPALITIES, WESTERN AUSTRALIA.—SUMMARY.

Year ended 31st October—	Municipalities.	Area.	Population.	Occupied Dwellings.	Valuation of Rateable Property.		Length of Roads and Streets.
					Capital Value.	Annual Value.	
	No.	Acres.	No.	No.	£	£	Miles.
1935 ..	21	59,503	194,581	44,936	45,597,957	2,356,000	(a) 850

(a) Exclusive of roads surveyed but not formed.

(b) *Revenue and Expenditure.* Revenue and expenditure of municipalities during the year 1935 are given hereunder :—

MUNICIPALITIES, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE.

Year ended 31st October—	Revenue.				Expenditure.			
	Rates.	Govt. Grants.	Other Sources.	Total.	Works and Improvements.	Interest and other Charges on loans.	Other Expenses.	Total.
	£	£	£	£	£	£	£	£
1935 ..	290,581	3,475	945,216	1,289,272	191,975	285,306	761,170	1,238,451

(c) *Assets and Liabilities.* The table below shows the assets and liabilities of municipalities at the 31st October, 1935 :—

MUNICIPALITIES, WESTERN AUSTRALIA.—ASSETS AND LIABILITIES.

31st October—	Assets.				Liabilities.		
	Balance in Hand.	Value of Property.	Accrued Sinking Funds.	Total.	Outstanding Debentures and Bonds.	Total.	
	£	£	£	£	£	£	
1935 ..	86,171	2,988,049	596,373	3,951,122	2,359,882	2,566,157	

(iii) *District Road Boards. (a) Summary.* The method of valuation is not identical in the case of all District Road Boards, as in some the assessment is based on the unimproved capital values and in others on the annual values. The unimproved capital value given in the following table is, therefore, only approximate. At the 30th June, 1935, the population was estimated at 203,000, and the number of occupied dwellings, 64,572.

DISTRICT ROAD BOARDS, WESTERN AUSTRALIA.—SUMMARY.

Year ended 30th June—	Number of Road Districts.	Area.	Unimproved Capital Value (Approximate).	Length of Roads in Existence.	Assets.	Liabilities.	Out- standing Loans.
	No.	sq. miles.	£	miles.	£	£	£
1935 ..	127	975,828	22,336,588a	25,252b	1,110,571	914,307	778,979

(a) Rated partly on unimproved capital value and partly on annual value.
roads surveyed but not formed.

(b) Exclusive of

(b) *Revenue and Expenditure.* The revenue and expenditure of district road boards are shown in the following table for the year ended 30th June, 1935 :—

DISTRICT ROAD BOARDS, WESTERN AUSTRALIA.—REVENUE AND EXPENDITURE.

Year ended 30th June—	Revenue.				Expenditure.			
	Rates.	Government Grants.	Other.	Total.	Adminis- tration.	Works.	Other.	Total.
	£	£	£	£	£	£	£	£
1935 ..	244,129	42,690	352,035	638,854	64,098	336,223	230,002	630,323

(iv) *Local Boards of Health.* Excluding twelve boards not under the control of municipalities or road boards there were 118 local boards of health in 1935. The revenue and expenditure as well as the assets and liabilities of these boards are shown in the following table. The financial year of municipal boards ends on the 31st October, and that of other boards on the 30th June.

LOCAL BOARDS OF HEALTH, WESTERN AUSTRALIA.—FINANCES.

Year	Number.	Revenue.			Expenditure.		Assets.	Liabilities.
		Rates.	Sanitary Charges and Rubbish Fees.	Total.	Sanitary and Rubbish Service.	Total.		
		£	£	£	£	£	£	£
1935 ..	118	61,549	71,581	154,477	87,710	149,789	135,402	34,870a

(a) Including outstanding loans, £24,820.

6. *Tasmania.*—(i) *General.* The whole State is divided into municipal districts, Hobart and Launceston being incorporated under separate Acts.

(ii) *Municipalities.* (a) *Summary.* The following table gives the number of municipalities, valuations, outstanding loans and length of roads for the year 1935-30. The number of occupied dwellings in Tasmania at the census of 30th June, 1933, was 52,484.

MUNICIPALITIES, TASMANIA.—SUMMARY.

Year ended 30th June—	Number of Municipali- ties.	Valuations.			Outstanding Loans.	Length of Roads.
		Annual Value.	Unimproved Value.	Total Capital Value.		
HOBART AND LAUNCESTON.						
1936 ..	No. 2	£ 1,211,201	£ 7,101,657	£ 19,823,955	£ 2,528,958	Miles. 235

COUNTRY MUNICIPALITIES.

1936 ..	47	1,474,329	14,734,624	31,107,690	540,900	12,418
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(b) *Revenue and Expenditure.* The next table gives the revenue and expenditure of all municipalities for the year 1935-36 :—

MUNICIPALITIES, TASMANIA.—REVENUE AND EXPENDITURE.

Year ended 30th June—	Revenue.			Expenditure.			
	Rates.	Government Grants.	Total.	Adminis- tration.	Works and Services.	Interest and Sinking Fund.	Total.
HOBART AND LAUNCESTON.							
1936 ..	£ 271,100	£ 700	£ 602,012a	£ 19,291	£ 379,911a	£ 190,186	£ 600,140a

COUNTRY MUNICIPALITIES.

1936 ..	180,592	47,325	326,286a	34,515	234,472a	38,187	319,587a
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(a) Excluding loan receipts £50,041 and loan expenditure £52,764.

7. *Basis for Municipal Rating and Limits for Rates.*—These matters were dealt with at some length in Official Year Book, No. 17, pp. 124-125.

§ 4. Summary of Local Government Finance.

1. *General.*—In the preceding parts of this chapter certain particulars have been given regarding local authorities in each individual State. In this paragraph, comparative figures are given for each State regarding the financial operations of the local governing bodies referred to in § 3. The particulars in the next two tables refer to financial years as follows :—New South Wales : 31st December, 1935. Victoria : 30th September, 1935, except Melbourne, 31st December, and Geelong, 31st August, 1935. Queensland : 31st December, 1935, except Brisbane, 30th June, 1936. South Australia : 30th June, 1935. Western Australia : municipalities, 31st October, 1935, district road boards, 30th June, 1935. Tasmania : 30th June, 1936.

2. Number, Revenue, Expenditure and Valuation of Local Authorities.—The subjoined table shows the number, revenue and expenditure, including loan money, and valuation of local authorities in each State and in Australia during the years indicated above. It should be noted that, excepting in Queensland and Tasmania, the metropolitan water supply and sewerage systems are not under municipal control; the particulars given of revenue and expenditure for the four States other than Queensland and Tasmania do not, therefore, include revenue and expenditure on account of these systems.

LOCAL AUTHORITIES (a) IN EACH STATE.—FINANCIAL SUMMARY, 1935.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.(b)	Tasmania.	Total.
No. of local authorities(a)	312	195	141	142	296	49	1,105
RECEIPTS.							
	£	£	£	£	£	£	£
Rates—				(i)			
General ..	4,182,726	3,308,136	1,749,856	604,880	323,031	148,373	12,713,152
Other ..	1,137,919	49,593	632,091		272,028	303,319	
Government grants, etc....	4,934,572	142,062	2,360,755	278,641	40,165	48,025	7,820,120
Loans and other sources ..	(c) 6,972,111	3,683,997	4,757,887	233,869	1,440,179	478,622	17,580,665
Total ..	17,227,358	7,184,658	9,509,589	1,137,390	2,082,603	978,339	38,110,937
EXPENDITURE.							
				(i)			
Works, services, etc. ..	12,214,628	4,784,809	6,483,309	860,990	615,908	614,383	25,580,027
Interest on loans and overdrafts	1,854,541	612,020	1,220,749	37,955	104,073		228,373
Redemptions, sinking funds, etc. ..	1,223,707	500,066	608,030	43,527	106,888		
Administration	587,287	522,599	442,862	98,520	182,147	53,806	1,884,221
Other ..	1,607,976	518,278	752,073	70,940	859,547	75,929	3,885,343
Total ..	17,488,229	7,027,721	9,597,029	1,114,032	2,018,503	972,191	38,219,205

VALUATIONS.

Capital value of improved property ..	d 513,192,654	602,561,400	f 72,420,869	170,014,585	(g) 45,597,957	50,931,645	(h)
Annual value of property ..	(e) 34,009,317	31,462,683	(h)	8,502,733	(g) 2,356,000	2,685,530	(h)

(a) Including particulars for all areas controlled by local governing bodies responsible for the construction and maintenance of roads and streets, such areas being variously known in the several States as cities, towns, boroughs, shires, municipalities and road board districts, etc. Particulars of county councils are excluded from the figures for New South Wales.

(b) Inclusive of Local Boards of Health under the control of Local Government Bodies.

(c) The amount included as loan receipts, £211,612, represents the amount of loan expenditure during the year. In general practice the two amounts would correspond closely as large loans, when floated, are frequently drawn upon in instalments which are regulated by the rate of spending.

(d) Excluding Shires.

(e) Assessed annual value, excluding Shires.

(f) Unimproved capital value.

(g) Municipalities only. District Road Boards are rated partly on unimproved capital value and partly on annual value, the total unimproved capital value being 222,330,388, and the annual value £109,317.

(h) Not available.

(i) Figures for municipal corporations for seven months only.

3. **Local Government Loans, 1935.**—The following table shows the amount of loans raised by local authorities during the year 1935, of loans current at the end of that year, the liability on account of interest and sinking fund, and the loans redeemed during 1935:—

LOCAL AUTHORITIES.—LOANS, 1935.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
£	£	£	£	£	£	£	£
Loans from General Government—							
Raised during year ..	473,300	75,397	509,728	4,621	..	3,000	1,066,046
Current at end of year ..	5,957,381 (d)	911,139	9,376,234	345,146	..	424,750	17,015,153
Loans from other Sources ..							
Raised during year ..	258,308	439,987	1,100,910	23,414	150,200	44,191	2,017,010
Current at end of year ..	233,052,449	11,893,315	15,995,455	734,638	3,163,690	2,649,094	67,420,541
Total—							
Raised during year ..	731,608	515,384	1,610,638	28,035	150,200	47,191	3,083,059
Current at end of year ..	26,910,337 (d)	12,804,654	25,341,689	1,079,784	3,163,690	3,071,744	84,441,994
Current Loans, exclusive of those obtained from General Government, raised within Australia ..	23,627,283	11,797,915	6,749,691	734,638	2,602,090	1,461,994	46,973,611
Annual Liability on account of Interest ..	51,515,857 (b)	549,931	1,157,247	50,189	173,018	136,649	3,583,791
Total Sinking Fund at end of year ..	64,633,167	721,973	2,321,753	31,759	720,566	599,016	6,031,233
Amount of Loans redeemed during year ..	21,138,504	(a)	537,164	42,357	151,969	84,790	(a)

(a) Not available. (b) Relating to loans other than Government. (c) Including contributions to Sinking Funds but excluding redemptions from Accumulated Sinking Funds.
(d) Excluding £1,822,626 due to Country Roads Board. (e) Fixed loans, excluding bank overdrafts and deferred payment debts.

§ 5. Water Supply, Sewerage and Drainage.

1. **New South Wales.**—(i) *General.* In Sydney and its suburbs the water supply and sewerage systems are controlled by the Metropolitan Water, Sewerage and Drainage Board, and in Newcastle and its suburbs by the Hunter District Water Supply and Sewerage Board. In country districts, both waterworks and sewerage works were formerly constructed by the Public Works Department, and, when completed, handed over to the local government authority affected, by which the cost was to be repaid. Under an Act passed in 1935, the raising of loans by councils until the 30th June, 1938, to meet the capital cost of works was facilitated, and councils are now required to undertake the work of construction. In certain cases the Government contributes towards the cost.

(ii) *Waterworks.* (a) *Metropolitan.—General.* The catchment area of the metropolitan water system, covering an area of 347 square miles, is drained by the Nepean, Cataract and Cordeaux Rivers. At 30th June, 1936, there were in the system 82 reservoirs with a total capacity of 113,008,642,744 gallons. Storage facilities are provided chiefly by four reservoirs, viz., Avon, 47,153,000,000 gallons; Cataract, 20,743,000,000 gallons; Cordeaux, 20,507,000,000 gallons; and Nepean, 17,505,000,000 gallons. The total length of mains is 1,170 miles and the maximum daily consumption during 1935-36 was 139,063,000 gallons on 27th November, 1935. The highest figure yet reached was 148,685,000 gallons on 24th January, 1934.

(b) *Newcastle.—General.* The supply is drawn from the Childerston Reservoir, and is piped about 50 miles to Newcastle. The storage reservoir capacity is 5,000 million gallons. In addition to supplying Newcastle, water is reticulated in Maitland, 20 miles distant from Newcastle, and in the Cessnock coalmining field, as well as in areas adjoining these centres. The supply also extends to the farming areas of Miller's Forest and the lakeside resorts of Belmont and Toronto. Water can also be supplied from the Hunter

River at Maitland if required. Reservoirs distributed throughout the Water Supply District number 36, with a total storage capacity of 60,480,510 gallons. The total length of mains is 872 miles.

(c) *Water Supplied, etc.* The following table gives the number of houses, the estimated population supplied, and other details for the year ended 30th June, 1936:—

WATERWORKS, SYDNEY AND NEWCASTLE.—WATER SUPPLIED, 1935-36.

System.	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Supply for the Year.	Average Daily Supply.		
					Per House.	Per Head of Estimated Population	Mains Laid.
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
Sydney ..	326,021	1,384,281	93,913	34,372,000	288	67.84	125
Newcastle	44,656	223,280	10,028	3,670,000	224	44.91	6

(iii) *Sewerage and Drainage.* (a) *Metropolitan.—General.* The Sydney sewerage system consists of three main out-falls, discharging into the Pacific Ocean. During 1935-36, new sewers laid measured 73 miles and 5,793 million gallons of sewage were pumped. Three miles of stormwater drains were constructed by the Board in 1935-36.

(b) *Newcastle Sewerage Works. General.* The sewerage works for Newcastle and suburbs as originally designed were completed by the Department of Public Works and vested in the Board. Their amplification, extension and improvement were authorized by the Newcastle and Suburbs Sewerage Amplification Act, 1928, passed on the 21st May, 1928. The cost of the work, which was completed in March, 1936, was £817,972.

The Cessnock sewerage work authorized by the Cessnock Sewerage Act, 1931, was completed at a cost of £251,781 and transferred to the Board on 30th June, 1933, but a sewerage rate has not yet been struck.

The Stockton sewerage work was authorized by the Stockton Sewerage Act, 1932, which was assented to on 21st December, 1932. The estimated cost of the scheme, which is now under construction, is £115,000. The capital expenditure to the 30th June, 1936, amounted to £104,943.

The stormwater drainage of Newcastle and adjoining areas is divided into two catchment areas, namely, the works in the Cottage Creek Stormwater Area and the works in the Throsby Creek Stormwater Area. The cost of the Cottage Creek scheme was £275,644 and it was transferred to the Board on 30th May, 1930. The cost of the latter was £798,771, the works being transferred to the Board on 28th February, 1936. Drainage rates have not yet been struck in respect of either of these stormwater drainages.

(c) *Particulars of Services.* The following table supplies details of sewerage services and stormwater drains as at 30th June, 1936.

SEWERAGE AND DRAINAGE, SYDNEY AND NEWCASTLE, 1935-36.

System.			Houses Drained.	Population Served.	Length of Sewers.	Length of Stormwater Drains.
			No.	No.	Miles.	Miles.
Sydney ..	..	..	226,885	968,926	2,179.1	82.0
Newcastle	..	..	24,066	120,330	248.8	34.8

(d) *Finances.* The following statement shows the revenue and expenditure on account of the services of waterworks, sewerage and drainage during the year 1935-36:—

WATERWORKS, SEWERAGE AND DRAINAGE, SYDNEY AND NEWCASTLE, 1935-36.

Item.	Revenue.	Working Expenses, Sinking Fund Contribution, Renewals, and Exchange. (a)	Interest.	Surplus + or Deficit.	Percentage of Working Expenses and Sinking Fund Contribution, etc. on Revenue.	Capital Debt.	Percentage of Revenue on Capital Debt.
	£	£	£	£	%	£	%
Sydney —							
Water ..	1,573,298	596,939	906,450	+ 70,209	37.92	26,180,768	6.01
Sewerage ..	900,723	349,912	500,302	+ 3,551	38.59	16,259,059	5.58
Drainage ..	39,311	14,575	28,919	— 4,180	37.07	896,950	4.38
Total ..	2,513,335	961,426	1,405,731	+ 62,478	38.15	43,336,777	5.81
Newcastle —							
Water ..	226,908	98,314	99,407	+ 29,277	43.31	2,912,875	7.79
Sewerage ..	77,442	44,053	23,821	+ 9,568	56.89	3,037,615	2.55
Total ..	304,440	142,367	123,228	+ 38,845	46.76	5,950,490	5.12

(a) Sinking fund contributions amounted to £141,599 in the case of the Sydney system, comprising £83,997 for water, £55,014 for sewerage and £2,585 for drainage, the distribution of exchange aggregating £144,053, being £83,891, £57,619 and £2,543 respectively. In the Newcastle system sinking fund contributions totalled £17,475 and exchange £17,599, the charges to water account being £10,530 and £14,197, and to sewerage £6,945 and £3,402 respectively.

(iv) *Waterworks, Sewerage and Stormwater Drainage Works in Country Towns.** The capital indebtedness of country towns' water and sewerage schemes was reviewed by a special committee appointed in 1933 and substantial remissions were made in some instances. At the 30th June, 1936, public water supplies having a capital debt of £3,549,164 were in operation in 95 towns outside the Metropolitan and Hunter River districts. Twenty-one towns were sewered and 12 towns had stormwater channels constructed by the Public Works Department. The capital debt of the sewerage schemes and stormwater channels was £1,407,070.

The water supply systems of Broken Hill and Junee are administered by the Public Works Department under special Acts. These services entailed capital expenditure amounting respectively at 31st December, 1935, to £481,475 and £226,256.

2. *Victoria.*—(i) *A. Melbourne and Metropolitan Board of Works.* (a) *General.* All land within 13 miles of the Post Office at the corner of Bourke and Elizabeth streets, Melbourne, together with the remaining areas of the Cities of Mordialloc and Moorabbin and a further portion of the Shire of Dandenong, but excluding 11 square miles in the Shires of Keilor and Braybrook under the control of the Keilor and St. Albans Waterworks Trust, is included within the metropolitan area for water supply, sewerage, main drainage and river improvement purposes. This territory covers 434 square miles of land area, and in 1936 embraced 26 cities, and parts of 12 shires, or a total of 38 municipalities or portions thereof. In addition, the Board supplies water to certain municipalities outside the metropolitan area.

The Board's liability on the 30th June, 1936, for loans raised was £25,103,084. The Board was then still empowered to borrow £2,030,849 before reaching the limit of its borrowing powers.

* Excluding the area of operations of the Hunter District Water Supply and Sewerage Board (Newcastle).

(b) *Receipts and Expenditure.* The ordinary receipts and expenditure for the year 1935-36 were £2,061,025 and £1,806,889 respectively, and the loan receipts and expenditure, £662,034 and £999,307 (including loan redemption £481,370) respectively.

In the following tables showing the finances of the various services, charges against General Revenue Account amounting to £320,666 have not been included.

B. Melbourne Water Supply. (a) *Number of Houses, Population, and Quantity of Water Supplied.* The following table gives particulars of services for the year 1935-36. The rate levied was sevenpence in the pound on the net annual value of the property served.

WATER SUPPLY, MELBOURNE.—PARTICULARS OF SERVICES.

Year ended 30th June—	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Consump- tion.	Total Water Consumption for the Year.	Average Daily Consumption.		Length of Mains, Reten- lation, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1936 ..	266,909	1,059,628	75.005	27,452,102	281.01	70.78	3,006

(b) *Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The total cost of construction, revenue, working expenses, percentage of working expenses on revenue, interest and surplus for the year ended 30th June, 1936, are given below. The total capital cost to that date was £11,623,709.

WATER SUPPLY, MELBOURNE.—FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1936 ..	167,469	800,512	144,701	10.82	528,818	180,993

(a) Includes interest on renewals and payments to sinking funds.

C. Melbourne Sewerage. (a) *Number of Houses Connected, etc.* Particulars of services for the year 1935-36 are given below. The rate levied was one shilling and two pence in the pound on the net annual value of the property served.

SEWERAGE, MELBOURNE.—PARTICULARS OF SERVICES.

Year ended 30th June—	Number of Houses for which Sewers are Provided.	Estimated Population for which Sewers are Provided.	Average Daily Pumping.	Total Sewage Pumped for the Year.	Average Daily Pumping.		Length of Sewers, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1936 ..	251,507	998,483	46,844	17,145,000	186.2	46.9	2,513

(b) *Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The total cost of construction, revenue, working expenses, percentage of working expenses on revenue, interest and surplus for the year ended 30th June, 1936, are given below. The total capital cost to that date was £13,436,028.

SEWERAGE, MELBOURNE.—FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1936 ..	103,071	987,404	148,655	15.00	670,173	162,570

(a) Includes interest on renewals and payments to sinking funds.

(c) *Metropolitan Sewage Farm.* The total area of the farm at the 30th June, 1936, was 22,634 acres. The following table gives details in connexion therewith for the year 1935-36. The total capital cost to the 30th June, 1936, was £1,187,305.

METROPOLITAN SEWAGE FARM.—FINANCES.

Year ended 30th June—	Capital Cost.	Cost of Sewage Disposal.	Interest.	Trading Profit.	Net Cost of Sewage Purification.
	£	£	£	£	£
1936 ..	17,659	25,751	55,088	9,099	71,740

(d) *Disposal of Night-soil from Unsewered Premises.* The total number of pans cleaned by the Board at its depots at Brooklyn, Campbellfield and Moorabbin, where the night-soil was disposed of by burial, was 620,291 for the year 1935-36.

D. *Melbourne Drainage and Rivers—Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The following table gives details in connexion therewith for the year ended 30th June, 1936. The total capital cost to that date was £1,100,062.

DRAINAGE AND RIVERS, MELBOURNE.—FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1936 ..	14,114	79,303	15,205	19.17	58,560	5,538

(a) Includes interest on renewals and payments to sinking funds.

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust, constituted in 1908, consists of five commissioners. The amount of loan money which may be raised is limited to £100,000 for water supply undertaking, £760,000 for sewerage undertaking, and £270,000 for sewerage installation to properties under the deferred payment system. The population supplied is about 46,300.

(b) *Water Supply.* The catchment area is about 16,000 acres. The storage capacity of all the reservoirs is 2,738,119,800 gallons. In addition, the State Rivers and Water Supply Commission has made available a supplementary supply of a minimum quantity of 550 million gallons of water per annum from the upper reaches of the river Barwon. There are 302 miles of mains within the water supply area. The total expenditure on waterworks to the 30th June, 1936, was £704,110, and the revenue for the year 1935-36 was £56,407; the sinking fund appropriations at June, 1936, amounted to £64,298, of which £60,750 has been expended in the redemption of loans.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 141½ miles of reticulation mains have already been laid. The drainage area is 9,538 acres, and the number of buildings within the drainage area is 11,541, and within the sewered areas 11,308, while 11,289 buildings have been connected with the sewers. The total expenditure to 30th June, 1936, on sewerage works was £644,994, and on the cost of sewerage installations under deferred payment conditions £257,056, of which £10,408 is outstanding. The revenue in 1935-36 amounted to £58,230, and the sinking fund appropriations at June, 1936, amounted to £61,801, of which £60,402 had been expended in the redemption of loans.

(iii) *The Ballarat Water Commission and the Ballarat Sewerage Authority.* (a) *General.* The Ballarat Water Commission was constituted on 1st July, 1888, and the Ballarat Sewerage Authority on the 30th November, 1926. The members of the Water Commission are the Sewerage Authority. The Commissioners number seven, three of whom, as chairman) being appointed by the Government, and four being elected by the Council of the City of Ballarat.

(b) *Water Supply.* The Water Supply District embraces an area of about 27 square miles, containing a population of about 43,000. The total storage capacity of the six reservoirs is 2,215,558,000 gallons.

The capital cost of construction of the waterworks is £700,000. The liabilities are loans due to the Government amounting to £10,545 as at 31st December, 1936. The revenue for the year 1936 was £32,973.

(c) *Sewerage.* The scheme as designed provides for a population of 60,000 persons. The capital cost of construction to 31st December, 1936, was £200,000. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. Eighty sewerage areas have been declared as at 1st January, 1937, comprising 8,003 tenements.

The scheme is financed by debenture issue loans from various financial institutions, £415,120 having been provided up to 31st December, 1936, of which £15,552 has been redeemed, leaving a loan liability of £300,508 for constructional works. An expenditure of £172,731 was incurred for house connexions, of which £13,007 has been redeemed, the balance outstanding being £37,157.

(iv) *Bendigo Sewerage Authority.* The members of the Bendigo City Council constitute this Authority. The sewerage district comprises the populated area of the city of Bendigo. The works are completed and the expenditure to 31st December, 1936, was £328,357 for sewerage scheme and £182,809 for house connexions, excluding those tenements connected privately. The number of tenements connected to sewers is 6,113.

(v) *Sewerage in other Country Districts.* Sewerage authorities have been constituted in the following districts:—Ararat, Bairnsdale, Benalla, Castlemaine, Colac, Dandenong, Echuca, Hamilton, Horsham, Kerang, Kyneton, Mildura, Shepparton, Swan Hill, Wangaratta, Warragul and Warrnambool.

(vi) *Water Supply in Country Towns and Districts.* Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but in some instances the control is by waterworks trusts or by municipal corporations.

The following table gives particulars regarding waterworks under the control of trusts and municipal corporations for the year 1936 :—

COUNTRY WATERWORKS, VICTORIA.—FINANCES.

Under Waterworks Trusts.

Under Municipal Corporations.

Year.	Number of Trusts.	Capital Cost.	Capital Indebted- ness.	Current Interest Out- standing.	Number of Cor- porations.	Capital Cost.	Capital Indebted- ness.	Current Interest Out- standing.
	No.	£	£	£	No.	£	£	£
1936 ..	107	1,806,247	1,340,874	664	28	887,234	564,264	374

3. Queensland.—(i) *Water Supply and Sewerage Department, Brisbane City Council.*

(a) *General.* The whole of the water supply in the metropolitan area and the bulk supply to the City of Ipswich is filtered.

The available storage in the Brisbane River is 543 million gallons, the catchment area being approximately 4,000 square miles. In Lake Manchester the storage capacity is 5,700 million gallons, and the catchment area 28.5 square miles. The capacity of Enoggera and Gold Creek reservoirs is 1,000 million gallons and 407 million gallons respectively, and the catchment area 12.8 and 3.8 square miles respectively.

The total capacity of the service reservoirs on Tarragindi Hill, Eildon Hill, Bartley's Hill, Highgate Hill, Roles Hill, Wickham Terrace and Paddington (elevated tank) is approximately 27,356,000 gallons.

(b) *Waterworks. Summary.* The following table gives a summary of operations for the year ended 30th June, 1936 :—

WATERWORKS, BRISBANE.—SUMMARY.

Year ended 30th June—	Length of reticulation Mains.	Number of Tenements Connected. (a)	Estimated Population Supplied.	Quantity Supplied.	Average Daily Supply.	Average Daily Supply per Head of Estimated Population.
	Miles.	No.	No.	1,000 Gallons.	Gallons.	Gallons.
1936 ..	890 $\frac{1}{2}$	68,808	292,434	4,542,352	12,410,797	43.00

(a) Exclusive of Ipswich, which is a bulk supply.

The total length of the trunk mains is 206 $\frac{1}{2}$ miles.

(c) *Sewerage.* At the 30th June, 1936, 21,127 premises were connected to the Council's sewerage system, the estimated population served being 65,062 persons. The total length of sewers in operation is 634 miles, consisting of 320 miles of sewers within premises, and 308 miles of main and reticulation sewers.

(d) *Waterworks and Sewerage Works Finances.* The subjoined table gives particulars regarding finance during the year ended 30th June, 1936 :—

WATER AND SEWERAGE WORKS, BRISBANE. FINANCES.

Year ended 30th June—	Capital Cost.	Net Revenue from Rates.	Management and Working Expenses.	New Works Construction.	Interest and Redemption of Loans, including Sinking Fund and Overdraft.
	£	£	£	£	£
1936 ..	9,360,389	702,107	146,910	558,374	(a) 604,706

(a) Exclusive of the sum of £55,209 paid as exchange.

(ii) *Country Towns.*—(a) *Water Supply.* In addition to the city of Brisbane, there were at the end of the year 1935 sixty-four country towns in Queensland provided with water supply systems (including seven in the course of construction) constructed by municipalities chiefly from Government loans. The subjoined statement gives particulars of all water supply systems, exclusive of Brisbane, for the year 1935 :—

COUNTRY WATER SUPPLY SYSTEMS.—QUEENSLAND.

Cost of Construction to 31st December, 1935—£3,011,630.

<i>Receipts.</i>		£	<i>Expenditure.</i>		£
Rates and sales of water	..	268,800	Office and salaries	..	20,648
Government and other loans	..	79,317	Construction	..	164,017
Government subsidy of loans	..	72,890	Maintenance	..	112,551
Other	..	21,500	Interest and redemption	..	118,160
			Other expenses	..	10,697
Total	..	442,507	Total	..	426,079
Assets	..	2,392,342	Liabilities	..	1,847,615

(b) *Sewerage Systems.* At the 31st December, 1935, there were two Cities outside the Metropolitan area, Mackay and Toowoomba, with sewerage works. The Toowoomba works have been in operation since 1926, whilst those for Mackay were in course of construction at the end of the year.

4. *South Australia.*—(i) *General.* The water supply and sewerage systems in this State are constructed and maintained by the Public Works Department.

(ii) *Adelaide Waterworks.* (a) *Summary.* The following table gives particulars for the year 1935-36, the figures for consumption being recorded by gaugings taken at the reservoirs and including evaporation and absorption. There are 56,617 meters in the Adelaide District.

ADELAIDE WATERWORKS.—SUMMARY.

Year ended 30th June --	Number of Assessments.	Annual Value.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption.
	No.	£	Acres.	Million Gallons.	Miles.	Million Gallons.
1936	133,355	5,032,883	110,274	7,774	1,310	7,747

(b) *Finances.* Particulars for the year 1935-36 are given below :—

ADELAIDE WATERWORKS.—FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.		Expenses.			Percent of Net Revenue on Capital Cost.
		Rates.	Total.	Adminis- tration.	Mainten- ance.	Other.	
	£	£	£	£	£	£	%
1936	4,382,346	325,876	381,080	21,152	53,460	18,450	93,068 6.57

(iii) *Adelaide Sewerage.* Particulars for the year 1935-36 are given hereunder:—

ADELAIDE SEWERAGE.—SUMMARY.

Year ended 30th June—	Length of Sewers.	Number of Con- nections.	Capital Cost of Revenue- Producing Works.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates, etc.	Total.	Admini- stration, Mainte- nance, etc.	Total.	
	Miles.	No.	£	£	£	£	£	%
1936 ..	5.20	53,130	1,074,908	102,519	169,396	21,007	37,952	7.90

(iv) *Country Water Supply. (a) Summary.* The chief items of information regarding these undertakings are set forth in the table below for the year 1935-36. There are 32,909 meters in country districts.

COUNTRY WATERWORKS, SOUTH AUSTRALIA.—SUMMARY.

Year ended 30th June—	Number of Assessments.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consump- tion.
	No.	Acres.	Million Gallons.	Miles.	Million Gallons
1936 ..	50,239	11,843,826	9,341	4,893	5,200

(b) *Finances.* The next table gives financial information for the year 1935-36:—

COUNTRY WATERWORKS, SOUTH AUSTRALIA.—FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.		Working Expenses.				Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Admini- stration.	Mainte- nance.	Other.	Total.	
	£	£	£	£	£	£	£	%
1936 ..	9,839,180	172,574	208,078	19,262	57,532	23,396	100,190	1.10

(v) *Other Sewerage Systems.* Information in summarized form is given below regarding the two suburban sewerage systems, viz., the Glenelg system and the Port Adelaide and Semaphore system, for the year 1935-36:—

SUBURBAN SEWERAGE SYSTEMS, SOUTH AUSTRALIA. SUMMARY.

Year ended 30th June—	Length of Sewers.	Number of Con- nections.	Capital Cost.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates.	Total.	Admini- stration, and Mainte- nance.	Total.	
	Miles.	No.	£	£	£	£	£	%
1936 ..	3.66	20,319	1,650,833	64,586	66,225	33,618	36,489	1.80

5. Western Australia.—(i) *General*. The water supply and sewerage systems of Western Australia are principally under the management of Government Departments, and are divided into the following categories:—(a) Metropolitan Water Supply, Sewerage and Drainage, covering Perth, Fremantle, Claremont, Guildford, Midland Junction and Armadale District; (b) Goldfields Water Supply; (c) Water Supply of other towns; (d) Agricultural Water Supply; and (e) Artesian and sub-artesian waters.

(ii) *Metropolitan Water Supply, Sewerage and Drainage*. (a) *General*. The sources of the metropolitan water supply are the Victoria Reservoir, Mundaring Reservoir, Churchman Brook Reservoir, Canning Dam, fifteen bores and the Armadale and Wungong pipe head dams. During the year 1935-36 the construction of the Canning Dam was continued. The sewerage system consists of septic tanks and percolating filters for Perth, septic tanks and ocean outfalls for Fremantle and Subiaco, and sedimentation tank and sludge digestion tanks at the Swanbourne Treatment Works serving the Claremont-Cottesloe area. A conversion of the present method of treatment at Subiaco to an activated sludge process was commenced during the year 1935-36 and satisfactory progress has been made. Gravitation sewers have been laid to intercept the flow to the Perth treatment works with the object of eliminating the existing tanks and filter beds. Extensive reticulation work was carried out during the year. At the 30th June, 1936, the number of premises connected with sewers was 27,850.

(b) *Summary*. The following table gives particulars regarding water supply for the year 1935-36:—

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA.—SUMMARY.

Year ended 30th June—	Estimated Population Supplied.	Number of Services.	Water Supplied.	Average Daily Supply.		Number of Meters.	Length of Mains.
				Per Head.	Per Service.		
	No.	No.	1,000 Gallons.	Gallons.	Gallons.	No.	Miles.
1936	227,182	56,349	4,742.285	57.03	229.94	37,277	900

(c) *Finances*. The table hereunder gives separate information for the water supply and sewerage and drainage branches for the year 1935-36:—

METROPOLITAN WATER SUPPLY, AND SEWERAGE AND DRAINAGE,
WESTERN AUSTRALIA.—FINANCES.

Year ended 30th June—	Water Supply.			Sewerage and Drainage.		
	Capital Cost.	Revenue.	Expendi- ture.	Capital Cost.	Revenue.	Expendi- ture.
	£	£	£	£	£	£
1936	4,182,465	260,016	249,215	2,637,997	106,667	126,716

(iii) *Goldfields Water Supply*. The source of supply for the Coolgardie and adjacent goldfields, as well as for towns and districts on or near the pipe-line, is the Mundaring Reservoir, which has a capacity of 4,050 million gallons. There are several classes of consumers—the railways, the mines, domestic and other—and in 1935-36 the railways consumed $5\frac{1}{2}$ per cent., the mines $32\frac{1}{4}$ per cent., and domestic, etc., $02\frac{1}{4}$ per cent. of the supply. The following table gives details for the year 1935-36:—

GOLDFIELDS WATER SUPPLY, WESTERN AUSTRALIA.—SUMMARY.

Year ended 30th June—	Total Con- sumption.(a)	Number of Services.	Length of Water Mains.	Capital Cost.	Revenue.	Expendi- ture.
	1,000 gallons.	No.	Miles.	£	£	£
1936	1,581,000	12,194	1,590	4,759,423	248,918	219,177

(a) Includes 211,811,000 gallons supplied to the Metropolitan Water Supply Department.

(iv) *Water Supply of Other Towns.* During the year 1935-36 water supplied to other towns and districts amounted to 290,529,109 gallons distributed as follows:—Railways, 30,073,600 gallons; mines, 36,090,800 gallons; and 224,364,709 gallons to domestic and other consumers.

(v) *Agricultural Water Supply.* During the year 1935-36, two wells were sunk and fourteen tanks excavated. During the twenty-six years from the 1st July, 1910, to the 30th June, 1936, 519 tanks were built, 371 wells sunk, and 3,523 bores put down to a total depth of 161,070 feet. Of the bores mentioned, 524 yielded fresh and 306 stock water.

(vi) *Artesian and Sub-artesian Waters.* Up to the 30th June, 1936, the total number of bores put down in search of artesian or sub-artesian water was 324, ranging in depth from 7 to 4,006 feet. These figures include 51 bores sunk in the metropolitan area.

6. *Tasmania.*—(i) *Hobart Water Supply.* The cost of this undertaking to the 30th June, 1936, was £487,716, but a considerable amount of reticulation work has been done out of revenue and not charged to capital account. The outstanding loans at 30th June, 1936, amounted to £368,248. At the same date the number of tenements supplied in the city and suburbs was 11,858 and the length of reticulation mains was 139 miles. The revenue for the year 1935-36 was £39,454.

(ii) *Hobart Sewerage System.* The revenue for the year ended 30th June, 1936, was £36,793. Up to that date 81.8 miles of sewers had been laid in connexion with the original city system at a cost of £217,214 and 8,529 tenements connected. Since the original city was sewerred, the municipalities of Queenborough and New Town have been included in the city, and are now being sewerred. In Queenborough 28 miles of sewers, connecting with 1,657 tenements, have been constructed at a cost of £129,591. In New Town a total of 38 miles of sewers has been laid, and 1,613 properties connected. The cost to 30th June, 1936, including surveys and sewerage outfall, was £114,432.

§ 6. Harbour Boards and Trusts.

1. *New South Wales.*—(i) *Maritime Services Board of New South Wales.* (a) *General.* The Port of Sydney is administered by the Maritime Services Board of New South Wales, a corporate body of five Commissioners, three of whom are full-time members and two, representing shipping and commercial interests, part-time members. The Board was brought into existence on the 1st February, 1936, by the Maritime Services Act, 1935, in order to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust in the case of the Port of Sydney and by the State Department of Navigation in the case of Newcastle and the outports.

(b) *Port of Sydney.* The functions of the Board in respect of the Port of Sydney include the provision of adequate wharfage, channels, lights and other port facilities, the control of shipping, pilotage, the imposition and collection of rates and charges on goods and vessels, the licensing of harbour craft and the general management and control of the Port.

The entrance to Sydney Harbour is nearly a mile wide, and is not less than 80 feet deep. Between the entrance, known as "The Heads", and the Harbour proper, a distance of 4 miles, there are two separate channels, each with a depth of 40 feet at low tide and a width of 700 feet. The foreshores are 188 miles in length, and the total area of the port is 14,284 acres, or 22 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The average range of tide is 4 feet 6 inches.

Exclusive of ferry wharves and jetties used for private purposes, there are 64,000 feet of wharfage controlled by the Maritime Services Board, and 9,500 feet of commercial wharfage privately owned. There is ample shed accommodation, and the port is well equipped with railway wharfage for the handling of traffic which is required to pass direct from ship to rail and vice versa. For the wheat export trade, in both bulk and bags, ample wharfage accommodation and handling equipment of the most modern character are available. Facilities in all directions can be very considerably extended when required. Approximately two thirds of the shipping wharves controlled by the Board are leased to shipping companies, the remainder, which are unleased, are directly maintained by the Commissioners.

The subjoined table gives particulars concerning the finances of the Board for the year 1935-36 :—

MARITIME SERVICES BOARD.—FINANCES.

Year ended 30th June	Revenue.					Working Expenditure.	Interest.	Surplus.	Total Capital Debt.
	Wharfage and Harbour Rates.	Tonnage Rates and Berthing Charges.	Other Sources.	Total.					
	£	£	£	£	£	£	£	£	£
1936 ..	701,745	36,058	302,807	1,040,610	635,178	449,747	191,383	11,450,092	

(a) Includes £47,325 sinking fund contributions.

(b) Includes £64,285 exchange.

(c) *Part of Newcastle.* In regard to the volume of shipping entered Newcastle ranks second in importance in New South Wales and third in Australia. It is primarily a coal-loading port, but its activities cover the shipment of general commodities. The wharfage and other facilities of the port have been further improved and extended to meet the actual and the anticipated growth of trade with the expansion of industry in the district. A terminal elevator, which has been erected for the handling of bulk wheat, has enhanced the importance of Newcastle as an exporting centre.

(d) *Port Kembla.* Port Kembla, which is sharing to an increasing extent in the shipping trade of the State, has an area of 330 acres, of which 230 acres have a minimum depth of 24 feet. Being adjacent to the southern coalfields and a rapidly developing industrial centre, its trade is growing and a great future for the port is predicted.

(e) *Other Ports.* In addition to the ports of Sydney and Newcastle, the Board controls 31 outports along a coastline of 609 miles.

(ii) *Port Charges.* There has been much ill-informed criticism of the port charges levied upon shipping in Australian ports. The fact is that the governmental charges compare favourably with those in other parts of the world when the services rendered are taken into consideration. They are much lower than the charges at the leading ports of the United Kingdom. Direct comparisons of port charges are difficult, if not impossible, to make, because of the differing port customs, and the absence of similarity in the nature and methods of applying them. It is considered that the most satisfactory method of comparison is to take the total collections by the port authorities, and arrive at the average rate per ton. This has been done in the case of the two leading ports in Australia and in the United Kingdom, and the figures are as follows :—

PORT CHARGES.—AUSTRALIA AND UNITED KINGDOM.

Port.	Net Tonnage of Vessels Entered.	Charges on Shipping.	Average Rate per Ton of Shipping.
		£	d.
Australia—			
Sydney (1935-36)	10,479,774	223,310	5.11
Melbourne (1935)	7,825,444	190,842	5.85
United Kingdom—			
London (1935-36)	30,000,000	1,410,000	11.28
Liverpool (1935-36)	21,023,950	1,254,689	14.32

2. *Victoria.*—(i) *Melbourne Harbour Trust.* (a) *General.* Information regarding the origin and constitution of this Trust will be found in Official Year Book No. 12, pp. 970 *et seq.* At the 31st December, 1936, the sheds available for wharfage accommodation had a length of 18,787 feet, covering an area of 1,246,530 square feet. The area of water in the bay and River Yarra under the control of the Trust is approximately 5,321 acres and the total length of wharves, piers and jetties in the port is 61,491 feet, giving an area of over 57 acres of wharfage, of which 52,243 feet is effective berthing space. During 1936 the quantity of material raised by dredging and excavation in the river and bay amounted to 2,540,015 barge yards at a cost of £74,994. The Trust has expended £354,403 in reclaiming land within its jurisdiction by depositing 16,640,716 barge yards of material thereon.

(b) *Finances.* During the year ended 31st December, 1936, the revenue (excluding refunds) of the Trust amounted to £785,278, and expenditure to £781,347 (including the amount of £150,578 paid to Consolidated Revenue and Geelong Harbour Trust). There was a net surplus on revenue account of £3,931. Appropriation for sinking fund and charges for depreciation, renewals and insurance against revenue account for the year amounted to £164,111. The capital expenditure for the year was £77,766. Up to the 31st December, 1936, the total capital expenditure amounted to £9,063,327, the loan indebtedness at that date being £4,102,400.

(ii) *Geelong Harbour Trust.* The Geelong Harbour Trust was reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbour Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor in Council. Revenue for the year 1936 was £96,583. Revenue expenditure was £82,158 and capital expenditure £29,442, while loans outstanding at the end of that year amounted to £580,824.

(iii) *Harbour Boards.* The Harbour Boards Act 1928 made provision for the establishment of Harbour Boards at Gippsland Lakes, Welshpool, Warnambool, Port Fairy and Portland, all of which ports were, at the commencement of the operation of this Act, under the control of the Public Works Department. The Warnambool Harbour Board, which was constituted on 29th May, 1928, under the provisions of this Act, was abolished on 30th June, 1936, by Order in Council and the port was restored to the control of the Public Works Department.

During the nine months ended 30th June, 1936, ordinary revenue amounted to £1,112 and ordinary expenditure was £1,089.

3. *Queensland.*—(i) *Bowen Harbour Board.* The Bowen Harbour Board consists of seven members, of whom two are appointed by the Governor in Council and the remainder elected by the electors of the town of Bowen and adjacent shires. The district under its jurisdiction comprises the area within the boundaries of the town of Bowen, the shires of Proserpine and Wangaratta, and division I. of the Shire of Ayr. The capital expenditure for the year 1936 was £249, while for the same period the revenue was £33,008 and the expenditure £32,529.

(ii) *Bundaberg Harbour Board.* The Bundaberg Harbour Board consists of nine members, of whom one is appointed by the Governor in Council, four elected by the electors of the city of Bundaberg, and two each by the electors of the shires of Gooburrum and Woongarra.

Revenue for the year 1936 amounted to £9,564 as compared with £9,150 in 1935, while expenditure for corresponding periods totalled £5,257 and £4,826 respectively.

(iii) *Cairns Harbour Board.* The Cairns Harbour Board, which controls the Port, consists of thirteen members, representing the city of Cairns and six adjoining shires. The wharves are exclusively under the control of this Board and consist of 1,900 lineal feet in reinforced ferro-concrete, upon which spacious sheds are erected with a floor area of 14,400 square feet. A most comprehensive electrical equipment is erected at the wharves capable of handling into ship two hundred tons of sugar per hour and a special sugar storage shed, fitted with this equipment, can accommodate 7,500 tons. The Board's suction dredger maintains a minimum depth of 22 feet of water in the entrance channel. Ships drawing over 27 feet of water can berth at wharves. Railway facilities are provided in front of and at rear of the wharves. The revenue of the Board, derived from harbour, berthage and miscellaneous dues, etc., for the year 1936, was £62,922, and expenditure £55,580.

(iv) *Gladstone Harbour Board.* The Gladstone Harbour Board is composed of seven members, two of whom are appointed by the Governor in Council and five elected by the electors of the town of Gladstone and the shires of Calliope and Miriam Vale.

The capital expenditure for the year 1936 was £5,791 and the total to the end of 1936 amounted to £108,241. The revenue for 1936 was £16,239, and the expenditure £16,552.

(v) *Mackay Harbour Board.* The Mackay Harbour Board consists of nine members elected by the electors of the city of Mackay and the shires of Pioneer, Sarina, Mirani and Nebo. Capital expenditure for the year 1936 was £136,368 made up as follows:—

General Fund—Capital expenditure on assets, £1,029.

Harbour Development—All expenditure capitalized, £135,339.

The total expenditure was £142,157 while receipts were made up of harbour dues, etc., £25,714; loan advances from Treasury, £74,099; and subsidy advances from Treasury, £45,901.

(vi) *Rockhampton Harbour Board.* The Rockhampton Harbour Board consists of eleven members, of whom seven are elected by the electors on the rolls for the city of Rockhampton, and the shires of Mount Morgan, Fitzroy and Livingstone. The remaining four are elected by the councillors of groups of inland shires.

The revenue for the year 1936 was £57,517, and the expenditure £53,207. The capital expenditure for the year 1936 was £6,910, and the total to the end of 1936 was £781,912.

(vii) *Townsville Harbour Board.* The Townsville Harbour Board is composed of nine members, of whom two are appointed by the Governor in Council and the remaining seven are elected by the electors of Townsville and adjacent towns and shires. All harbour works and conveniences for the use of shipping are under the control of the Board. The capital expenditure for the year 1936 was £11,152; the receipts for the year 1936 were £72,523, and the expenditure £68,707.

HARBOUR BOARDS, QUEENSLAND.—FINANCES.

Year ended 31st December	Revenue.		Expenditure.					Assets.	Liabilities.
	Wharfage and Harbour Dues.	Total.	Interest on Loans.	Redemption of Loans.	Construction and Maintenance.	Other.	Total.		
1936 ..	£ 197,685	£ 387,187	£ 36,515	£ 26,540	£ 280,057	£ 30,278	£ 373,990	£ 1,561,017	£ 1,960,253

4. *Western Australia.*—(i) *Fremantle Harbour Trust.* (a) *General.* Fremantle Harbour is controlled by a Board of five Commissioners appointed by the Governor in Council. A description of the works was given in a previous Year Book (see No. 12 p. 973). Since that account was written, the inner harbour and entrance channel have been dredged to a depth of 36 feet below the lowest known low water. The berthage accommodation at all the quays has also been deepened to 36 feet.

(b) *Finance.* The following table gives financial data for the year 1935-36 :—

FREMANTLE HARBOUR TRUST.—FINANCES.

Year ended 30th June—	Expenditure.							
	Revenue. (a)	Working Expenses.	Interest.	Sinking Fund.	Renewals Fund.	Capital Expendi- ture.	Surplus Revenue. (b)	Total.
	£	£	£	£	£	£	£	£
1936 ..	447,121	204,529	128,506	15,827	2,000	7,408	91,269	449,539

(a) Including interest from sinking funds, £4,296.

(b) Paid to Consolidated Revenue.

(ii) *Bunbury Harbour Board.* (a) *General.* The Bunbury Harbour Board consists of five members appointed by the Government. The jetty is 4,900 feet long, with berthage accommodation of 2,700 feet on the west side and 3,000 feet on the east side, and is electrically lighted.

(b) *Finances.* Details for the year 1935-36 are given hereunder. Surplus revenue is paid into Consolidated Revenue Fund to meet interest and sinking fund :—

BUNBURY HARBOUR BOARD.—FINANCES.

Year ended 30th June—				Capital Account.	Revenue.	Expenditure.
				£	£	£
1936 ..	..	..	..	587,052	21,799	(a) 33,061

(a) Includes Interest on Capital Account £24,765, only £8,500 of which was contributed from the earnings of the Board.

5. *Tasmania.*—(i) *Marine Board of Hobart.* (a) *General.* The Marine Board of Hobart consists of nine wardens elected by the ship-owners of the Port of Hobart and the importers and exporters of goods into or from any port within the jurisdiction of the Board.

(b) *Finances.* The following table gives details for the year ended 30th June, 1936 :—

MARINE BOARD OF HOBART.—FINANCES.

Year ended 30th June—	Capital Debt.	Revenue.		Expenditure.		Total.
		Taxes, Dues, etc.	Total.	Interest and Sinking Fund.	Works, Services, etc.	
	£	£	£	£	£	£
1936 ..	45,377	48,244	54,374	11,755	37,212	19,007

(ii) *Marine Board of Launceston.* (a) *General.* The Marine Board of Launceston consists of five wardens, three elected by the ratepayers of the city of Launceston and two by ratepayers of the municipalities within the Tamar District.

(b) *Finances.* The following table gives details for the year ended 30th June, 1936:—

MARINE BOARD OF LAUNCESTON.—FINANCES.

Year ended 30th June —					Total Capital Debt.	Revenue.	Expenditure.
					£	£	£
1936	..	..	..	..	296,995	57,903	66,269

(iii) *Marine Board of Burnie.* The length of the breakwater is 1,250 feet, with a depth up to 42 feet at low water, and a wharf alongside, 630 feet in length by 91 feet wide, with a depth at low water from 24 to 40 feet. There are two other timber wharves 600 feet and 400 feet long respectively. The receipts for the year ending 30th June, 1936, were £20,727, and the expenditure £21,691, including £14,233 interest on loans, etc.

§ 7. Fire Brigades.

1. *New South Wales.*—(i) *General.* Under the Fire Brigades Act, 1909–1927, a Board of Fire Commissioners consisting of eight members operates, and 120 fire districts have been constituted. The cost of maintenance of fire brigades is borne in proportions of quarter, quarter, and half by the Government, the municipalities, and the insurance companies concerned, but the expenditure must be so regulated that the proportion payable by the councils in a fire district shall not exceed the amount obtainable from ¼d. in the £ rate on the unimproved capital value of rateable land in the fire district: provided that the Board, with the consent of the Minister, and at the special request of the councils of the municipalities or shires constituting or forming part of a fire district or a majority in number of such councils may, as to that district, exceed the limit above provided.

(ii) *Board of Fire Commissioners of New South Wales.* At the 31st December, 1936, the Board had under its control 48 fire stations in the Sydney fire district and 131 fire stations in the country fire districts. The Sydney fire district includes the City of Sydney and suburbs, comprising a total area of 178 square miles. The revenue for the year 1936 was £3,70,008, made up as follows:—From the Government, £2,22,807; municipalities and shires, £92,807; fire insurance companies and firms, £185,614; and from other sources, £7,870. The disbursements for the year were £390,877.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1925 provides for a Metropolitan Fire Brigades Board, and a Country Fire Brigades Board, each consisting of nine members, with local committees in country districts. The income of each board is derived in equal proportions from the Treasury, the municipalities and insurance companies.

(ii) *Metropolitan Fire Brigade Board.* On the 30th June, 1936, the Board had under its control 43 stations. The total receipts for the year 1935–36 were £2,05,875, comprising contributions £155,314, receipts for services £2,63,774, and interest and sundries £10,000. The expenditure was £2,06,043, made up as follows:—Salaries (permanent staff) £1,17,702, interest and repayments of principal £1,288, and other expenditure £75,053. There was no loan expenditure during the year—the loan indebtedness at the end of the year being £187,747.

(iii) *Country Fire Brigades Board.* At 30th June, 1936, there were 120 municipal councils and 107 insurance companies included in the operations of the Act. The brigades are composed chiefly of volunteers, but in the large centres a few permanent station keepers and partially-paid firemen are employed. Complete fire alarm systems are installed in 40 of the larger provincial cities and townships. There were 141 registered brigades at the end of June, 1936. For the year 1935–36 the revenue was £30,351 and the expenditure £30,752. The loan expenditure for the year amounted to £0,858, and at the close of the year the loan indebtedness was £49,877.

3. *Queensland.*—(i) *General.* The Act of 1920 made provision for the retention of existing fire districts, and for the constitution of new districts. For each district there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows:—The Treasurer two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades in a district must be registered.

(ii) *Fire Brigades Boards.* At the 30th June, 1936, there were fire brigades in 33 towns. The total revenue for the year 1935–36 was £96,007, received mainly from the following sources:—Government £21,459, local authorities, £21,468, insurance companies £31,858, and loans (Government and other), £17,818. The total expenditure for the year was £93,988, the chief items being salaries and wages £51,820, buildings, repairs, etc., £11,855, plant, stores, etc., £12,647, and interest and redemption of loans, £9,397.

4. *South Australia.*—(i) *General.* The Fire Brigades Act of 1913 and amendments provide for a Board of five members, and the expenses and maintenance of brigades are defrayed as to two-ninths by the Treasury, five-ninths by insurance companies, and two-ninths by the municipalities concerned. The contribution of the Treasury, however, is limited to £10,000 and if two-ninths of the expenses and maintenance exceeds this amount, five-sevenths of the excess is contributed by the insurance companies and two-sevenths by the municipalities.

(ii) *Fire Brigades Board.* At the end of 1936 there were altogether 26 fire brigade stations. The total revenue for the year 1936 was £42,272.

5. *Western Australia.*—(i) *General.* Under the 1916 Act every municipal or road board district is constituted a fire district under the control of the Western Australian Fire Brigades Board. The income of the Board is derived as to two-eighths from Government, three-eighths from municipalities, and three-eighths from insurance companies.

(ii) *Western Australian Fire Brigades Board.* The whole of the brigades throughout the State are now controlled by the Western Australian Fire Brigades Board, and number 41. The revenue and expenditure for the year ended 30th September, 1936, were £57,828 and £57,207 respectively. The estimated value of land and buildings was £83,000 and of plant £37,600.

6. *Tasmania.*—(i) *General.* The municipal council of any municipality may, under the Act of 1920, petition the Governor to proclaim the municipality or any portion of it to be a fire district, each district to have a Board of five members. The expenses of each Board are borne in equal proportions by contributions from the Treasurer, the municipality concerned, and insurance companies insuring property within the district.

(ii) *Hobart Fire Brigade Board.* The revenue of the Board for the year 1936 amounted to £6,325.

CHAPTER XVI.

TRADE.

§ 1. Introductory.

Constitutional Powers of the Commonwealth in regard to Commerce.—The powers vested in the Commonwealth Parliament by the Commonwealth Constitution Act with respect to overseas trade and commerce will be found in Sub-section 51 (i) and sections 86 to 95 of the Act.

§ 2. Commonwealth Legislation affecting Oversea Trade.

1. **General.**—In previous issues of the Year Book brief particulars of the various Commonwealth Acts and amendments thereof affecting overseas trade have been given in chronological order. This information is not repeated in the present issue. Particulars of recent legislation relating to overseas trade are given hereunder.

2. **Customs Tariffs.**—The Customs Tariff 1933 which incorporates the Customs Act 1901-1930 repealed earlier Customs Tariff Acts. The Tariff Schedules in operation at 30th June, 1937, were the Customs Tariff 1933-1936 and Customs Tariff Proposal No. 1 in force from 25th June, 1937, also Customs Tariffs granting preferential rates of duty to Canada, New Zealand and the Territories of Papua and New Guinea.

The Customs Tariff 1921-1930 provided a British Preferential Tariff, an Intermediate Tariff and a General Tariff. The Customs Tariff 1933 made no provision for an Intermediate Tariff but this feature was restored by the Customs Tariff 1936.

"British Preferential Tariff" rates of duty apply to goods the produce or manufacture of the United Kingdom provided such goods comply with the laws and statutory regulations for the time being in force affecting the grant of British preference, and that the goods have been shipped in the United Kingdom to Australia and have not been transhipped, or, if transhipped, it is proved to the satisfaction of the Collector of Customs that the intended destination of the goods, when originally shipped from the United Kingdom, was Australia.

The benefits of the British Preferential Tariff may be extended wholly or in part to any British non-self-governing colony, British protectorate or to certain territories governed under British mandate. The benefits of the British Preferential Tariff have been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand and to certain goods the produce of British non-self-governing colonies.

The "Intermediate Tariff": In submitting tariff schedules to Parliament on 20th March, 1936, the Minister for Trade and Customs said: "Another new feature of the schedules is the Intermediate Tariff. It has been re-introduced to provide a convenient avenue for expressing the level of duties which the Government propose should form the basis for trade treaties. The rates proposed under the protective items of the Intermediate Tariff express, in every case, a protective level for Australian industry as well as preserving the margins required under the Ottawa Agreement."

The Customs Tariff 1933-1936 provides that the Governor-General may from time to time by proclamation declare that the Intermediate Tariff shall apply from a date and time specified to goods specified in the proclamation which are the produce or manufacture of the British or foreign country specified in the proclamation.

The Intermediate Tariff was brought into operation on 1st January, 1937, by Customs Proclamations Nos. 338, 342 and 343 which granted intermediate rates of duty to specified goods the produce of the United Kingdom, the Dominions and Colonies and, in accordance with most favoured nation treatment, to most foreign countries. The United States of America is an important exception while Japan is entitled to intermediate rates for eleven items only.

The "General Tariff" applies to all importations excepting :—

- (a) Goods the produce or manufacture of the United Kingdom, shipped in the United Kingdom ;
- (b) Goods the produce or manufacture of the following countries when admissible under the British Preferential Tariff or at a special rate of duty : Canada (*vide* Act No. 13 of 1931, Act No. 5 of 1934, and Acts No. 16 and No. 70 of 1936) ; New Zealand (*vide* Act No. 26 of 1933 as amended by Act No. 2 of 1934) ; Norfolk Island (*vide* Act No. 15 of 1913) ; Papua and New Guinea (*vide* Act No. 84 of 1936) ; and British non-self-governing Colonies, British Protectorates and certain Territories governed under British mandate.
- (c) Goods admitted under the provisions of the Intermediate Tariff.

The Customs Tariff 1933-1936 provides for duties on certain goods to be deferred. Where a deferred duty on any goods is provided in the Schedule, the Minister shall refer to the Tariff Board for inquiry and report the question whether the deferred duty should or should not operate on and after the date to which it has been deferred. The Board shall report whether the goods in respect of which the deferred duty is provided are being made or produced in Australia or will be so made or produced on, or immediately after, the date to which the duty has been deferred—(a) in reasonable quantities ; (b) of satisfactory quality ; and (c) at a reasonable price having regard, among other things, to the probable economic effect of the imposition of the deferred duty upon other industries concerned, and upon the community in general. Upon receipt of a report from the Tariff Board, the Minister may defer the duty further by notice published in the *Gazette*.

During the period 3rd April, 1930, to 23rd July, 1931, a special customs duty equal to 50 per cent. of the rate already in force was imposed on a number of items which were mostly of a luxury nature. The list of items affected was gradually reduced between 24th May, 1932, and 28th February, 1935, from which date the special customs duty ceased to operate.

By proclamation of 4th April, 1930, the importation of 78 classes of goods into the Commonwealth was prohibited, but these prohibitions were all removed during the period from 24th February to 31st August, 1932.

In pursuance of the trade diversion policy of the Commonwealth Government (*see* par. 9 of this section), an amendment of the Customs (Prohibited Imports) Regulations of 22nd May, 1936—Item 21—prohibited the import into Australia, except under special licence, of 84 classified groups of goods produced or manufactured in foreign countries. The principal items affected wholly or in part are preserved vegetables, cotton, artificial silk and silk piece goods, costumes, dresses and robes, corsets, men's fur felt hats, linoleums, iron and steel plates, sheets and pipes, copper pipes, lawn mowers, pasteurizers, typewriters, cranes, elevators, etc., electrical goods including refrigerators, piston rings, piston pins and valves, storage batteries for motor vehicles, sparking plugs, electric light and power cable, wireless receivers, wireless valves, carbon manufactures, guns, rifles and cartridges, lampware, plate glass, toilet preparations, wooden staves, cinematographs, boots and shoes, writing and typewriting paper, brake and transmission lining, motor cycles, motor cycle and side car parts, motor bodies, panels and parts including undergear, vacuum cleaners and carpet sweepers, cameras, collodion sheets, machines and machinery, locomotive engines and parts, engines of diesel or heavy oil type.

Under Item 22 the import, except under special licence, is prohibited of motor vehicle chassis produced or manufactured in any country except the United Kingdom. Imports of chassis from the principal suppliers other than the United Kingdom are restricted to the same level of imports as for the twelve months ended 30th April, 1936.

From the same date, 22nd May, 1936, customs duties were increased on imports of certain items of cotton, artificial silk and silk piece goods and on motor chassis. The duties imposed on cotton and artificial silk piece goods were reduced as from 1st January, 1937.

A further amendment of the Customs (Prohibited Imports) Regulations of 3rd July, 1936 (Item 23 of the Second Schedule) prohibited except under special licence, the import into Australia of specified goods from any country or any colony or territory administered by that country which on or after 24th June, 1936, and on or before 26th June, 1936, had put into effect any ordinance, proclamation, or other instrument—

- (a) providing in effect that certain goods produced or manufactured in Australia shall not be imported into that country or any such colony or territory except with the permission of the competent Minister of State of that country; or
- (b) imposing on certain goods produced or manufactured in Australia import duties in addition to the import duties prescribed in the Import Tariff annexed to the Tariff Customs Law of that country.

The foregoing amendment to the Customs (Prohibited Imports) Regulations was repealed under the provisions of the trade agreement between the Governments of Japan and the Commonwealth of Australia which came into force on 1st January, 1937.

3. *Primage Duty*.—From 10th July, 1930, a primage duty of 2½ per cent. *ad valorem* was imposed on all goods whether dutiable or not dutiable, in addition to the duties collected in accordance with the Customs Tariff 1921–1930, excepting bullion, specie, radium and certain special governmental and other imports. The rate of primage duty was subsequently increased to 4 per cent. as from 6th November, 1930.

A proclamation of 14th May, 1931, exempted certain aids to primary production, and on 11th July, 1931, a further amendment, in addition to extending the list of these goods and also exempting some minor imports from primary duty, provided for a rate of 4 per cent. *ad valorem* on a few other items, mainly aids to production, and increased the *ad valorem* rate of primage duty to 10 per cent. on all other articles imported. Amendments made since 11th July, 1931, have greatly increased the list of goods exempt from primage duty.

The Customs Tariff (Primage Duties) Act 1934 imposed primage duty at rates of 4, 5, and 10 per cent. and provided for preferential treatment of certain goods admitted under the British Preferential Tariff. A proclamation of 12th December, 1934, exempted from primage duty goods the produce or manufacture of Fiji and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territories of New Guinea and Papua. Under the Customs Tariff (New Zealand Preference) Act goods the produce or manufacture of New Zealand are exempt from primage duty. Similarly under the Norfolk Island Act 1913 goods the produce or manufacture of Norfolk Island are exempt from primage duty.

Customs proclamations, which came into force on 1st January, 1937, and later dates, provide in respect of specified tariff items exemptions from, and reduced rates of 4 and 5 per cent. primage duty on imports the produce or manufacture of "proclaimed countries". All countries whose goods are admissible to Australia under the intermediate customs tariff rank as proclaimed countries and include the United Kingdom, the Dominions and Colonies and most foreign countries. An important exception is the United States of America while Japan is a proclaimed country for eleven items only.

In 1935–36 the value of goods from the United Kingdom admitted under British Preferential Tariff rates was, in Australian currency, £A39,079,846 and the primage duty paid, £1,545,106. This amount is £968,661 less than the amount which would have been paid if certain goods had not been subject to preferential rates of primage duty.

4. *Preferential Tariff*.—(i) *British Preference*. The Commonwealth Tariff 1908 provided Preferential Tariff rates in favour of goods produced or manufactured in the United Kingdom. Subsequent amendments of the Tariff have extended the list of articles to which the preferential rates apply. The favourable treatment of the United Kingdom was again extended by Customs Tariff 1921 and when this Act was incorporated in Customs Tariff 1921–1930 further concessions were granted.

On the introduction of the preferential treatment of British goods by the Commonwealth Tariff, it was required that British material or labour should represent not less than one-fourth the value of such goods. From the 1st September, 1911, it was

required in regard to goods only partially manufactured in the United Kingdom, that the final process or processes of manufacture should have been performed in the United Kingdom and that the expenditure on material of British production and/or British labour should have been not less than one-fourth of the factory or works cost of the goods in their finished state.

These conditions were superseded by Customs Act 1934 as amended by Customs Act 1936 which repealed section 151A of the Principal Act and inserted in its stead:—

151A. (1.) For the purposes of any Customs Tariff (whether passed before or after the commencement of this section) which specifies in respect of any goods rates of duties of Customs lower than the Intermediate Tariff in respect of those goods, the following goods shall, subject to this section, be deemed to be the produce or manufacture of the United Kingdom:—

- (a) Goods which are wholly produced or wholly manufactured in the United Kingdom from materials in one or more of the following classes—
 - (i) Materials wholly produced or wholly manufactured in the United Kingdom or in Australia.
 - (ii) Imported unmanufactured raw materials.
 - (iii) Imported manufactured raw materials as determined by the Minister.
- (b) Goods of the factory or works cost of which not less than seventy-five per cent. is represented—
 - (i) by labour or material of the United Kingdom; or
 - (ii) by labour or material of the United Kingdom and labour or material of Australia.
- (c) Goods of a class or kind not commercially produced or manufactured in Australia and of the factory or works cost of which not less than twenty-five per cent. is represented—
 - (i) by labour or material of the United Kingdom; or
 - (ii) by labour or material of the United Kingdom and labour or material of Australia.

(2.) Where in relation to any class or kind of goods to which paragraph (c) of the last preceding sub-section applies the Minister is satisfied that it is desirable that 50 per cent. should be substituted for the percentage specified, the Minister may so determine and thereupon that paragraph shall apply to that class or kind of goods as if 50 per cent. were so substituted accordingly.

(3.) No goods shall be deemed to be the produce or manufacture of the United Kingdom unless the final process of their production or manufacture was performed in the United Kingdom.

(4.) The provisions of this section shall apply *mutatis mutandis* in relation to goods which are imported from any country in respect of which a Customs Tariff within the meaning of sub-section (1.) of this section applies, in like manner as they apply in relation to goods imported from the United Kingdom.

Sub-sections 5 and 6 and 8 to 10 of section 151A relate to certain powers of the Minister and the meaning of "Intermediate Tariff" and sub-section 7 to the meaning of "unmanufactured raw materials."

Section 151B of Customs Act 1936 prescribes the conditions relating to the application of the Intermediate Tariff.

The Customs Tariff 1933-1936 provides that the British Preferential Tariff rates of duty apply to goods or manufactures of the United Kingdom provided such goods comply with the laws and statutory regulations for the time being in force affecting the grant of British preference (see Section 151A of Customs Act 1901-1936). Customs Tariff 1933-1936 also provides that the benefits of the British Preferential Tariff may be extended wholly or in part to any British non-self-governing colony, British Protectorate, or to certain territories governed under British mandate. The benefits of the British Preferential Tariff have also been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand.

At the Imperial Economic Conference held at Ottawa, Canada, during July and August, 1932, a trade agreement providing increased preference was made between the Government of the United Kingdom and the Government of the Commonwealth of Australia. The Tariff proposals embodying the terms of the trade agreement came into operation on the 14th October, 1932. An Act entitled the United Kingdom and Australia Trade Agreement Act 1932 approved the provisions of the trade agreement arising out of the Conference at Ottawa. Briefly stated the Commonwealth Government agrees (a) to invite Parliament to pass legislation making the tariff changes necessary to give effect to the preference formula set forth in the agreement; (b) that protection by tariffs shall be afforded only to those industries which are reasonably assured of sound opportunities for success; (c) that during the currency of the agreement the tariff shall be based on the principle that protective duties shall not exceed such a level as will give United Kingdom producers full opportunity of reasonable competition on the basis of the relative cost of economical and efficient production, provided that in the application of such principle special consideration may be given to the case of industries not fully established; (d) that the Australian Tariff Board review existing protective duties in accordance with the above principles, and after the receipt of the report of the Board the Parliament shall be invited to vary, wherever necessary, the tariff on goods of United Kingdom origin in such manner as to give effect to such principles; (e) that no new protective duty shall be imposed and no existing duty shall be increased on United Kingdom goods to an amount in excess of the recommendation of the Tariff tribunal; (f) that United Kingdom producers shall be entitled to full rights of audience before the Tariff Board when it has under consideration above-mentioned matters; (g) that, in so far as concerns goods the produce or manufacture of the United Kingdom, the Commonwealth Government undertake to (i) repeal the proclamation prohibiting the importation of certain goods; (ii) remove as soon as practicable the surcharges imposed by resolution introduced into the Parliament of Australia on 24th May, 1932; and (iii) to reduce or remove primage duty as soon as the finances of Australia will allow. The agreement shall remain in force for a period of five years and come into effect on 20th August, 1932 (subject to the necessary legislative or other action being taken).

The prohibitions and surcharges referred to in this agreement have been abolished and primage duty on a large number of items removed or reduced. The concessions granted by the Government of the United Kingdom under the terms of the Ottawa trade agreement on goods of Australian origin are set out briefly in par. 6 of this section. Further reference to this trade agreement will be found in the Appendix to Official Year Book, No. 26, 1933.

On the basis of the imports during 1913 the preferential provisions of the Tariff of 1908-1911 covered 65 per cent. of the imports of merchandise of United Kingdom origin, the margin of preference being equal to 5 per cent. of the value of the goods. On the basis of the imports during 1935-36 the Customs Tariff 1933-1936 extended the application of the Preferential Tariff rates to 90 per cent. of the imports from the United Kingdom, and at the same time increased the margin of preference to 16.7 per cent. *ad valorem*. These percentages relate to all imports on which preference was granted, whether dutiable or free under the preferential provisions. With regard to imports on which preference was granted and which were dutiable under both the Preferential and General Tariffs, the average equivalent *ad valorem* rate of duty paid in 1935-36 under the Customs Tariff 1933-1936 on goods of United Kingdom origin was about 18.4 per cent., whereas the same goods under the General Tariff rates would have been called upon to pay an average rate of about 37.4 per cent.

An application of the Customs Tariff 1933-1936 to the total imports of £A43,276,018 (including outside packages) from the United Kingdom entered for home consumption during the year 1935-36 shows that the value of the goods of United Kingdom origin which participated in the preferential provisions of the Tariff was £A30,070,840, upon which duty to the amount of £A3,002,020 was collected. Under the General Tariff the same goods would have paid £A10,173,540 duty or £A6,510,029 more than was paid at preferential rates, representing an additional duty of 16.7 per cent. on the value of the goods. The principal classes which benefited under the Preferential Tariff and the

additional duty that would have been collected under the General Tariff during the year 1935-36 were metals and metal manufactures, £1,717,536; textiles, £1,653,264; machines and machinery, £886,579; paper, £406,230; drugs, chemicals, etc., £348,962; earthenware, glass, etc., £237,095; apparel, £194,290; manufactured fibres, £158,998; optical, surgical and scientific instruments, £118,896; stationery and paper manufactures, £86,682; and spirituous liquors, £85,305.

If a preferential tariff had not been in operation in 1935-36 £A6,510,629 additional customs duty would have been collected under the general tariff on United Kingdom goods imported at preferential rates. It would be improper, however, to speak of this sum as the "value" of preference to the United Kingdom as some of the preferential goods would have come from the United Kingdom without preference.

The margin of preference granted by the preferential tariff has been increased to some extent by the operation of the Customs Tariff (Exchange Adjustment) Act 1933-1936. This Act provides for deductions of duty consequent on the depreciation in the value of Australian currency in relation to the currencies of other countries but is limited in its application to protected goods admitted under the British preferential tariff. On goods of United Kingdom origin subject to exchange adjustment in 1934-35 the deductions amounted to £460,729 and reduced the duty from £3,804,325 to £3,343,596. The total amount deducted in 1935-36 cannot be stated as the Tariff Board since the end of 1934 has recommended "net" rates of duty after making due allowance for exchange adjustment.

The value of goods from countries other than the United Kingdom which were adversely affected by the preferential provisions of the Tariff amounted to £A28,628,946, and the duty collected thereon was £A8,105,704, or £A5,082,534 more than would have been paid under the British Preferential Tariff Rates.

The following table shows the effect of the Preferential provisions of the Customs Tariff on imports of goods affected favourably or adversely by the British Preferential Tariff during the years, 1933-34, 1934-35 and 1935-36:—

EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS TARIFF.

IMPORTS OF GOODS AFFECTED FAVOURABLY OR ADVERSELY BY THE BRITISH PREFERENTIAL TARIFF.

Particulars.	United Kingdom.			Other Countries.(a)		
	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.
GOODS OF A KIND WHICH WERE "FREE", IF FROM UNITED KINGDOM.						
Value of goods cleared for consumption ..	£ 13,309,515	16,249,321	10,189,951	6,731,535	9,804,298	12,638,770
Amount of Duty collected thereon ..	£ ..	..	..	1,064,661	1,621,495	2,013,394
Average <i>ad valorem</i> rate of Duty collected ..	% ..	..	..	15.8	16.5	..
Duty which would have been collected under General Tariff rates ..	£ 2,012,102	2,270,359	2,728,538	..	..	..
Average <i>ad valorem</i> rate of Duty which would have been collected under General Tariff rates ..	% 15.1	14.0	11.2	..	..	..

GOODS OF A KIND WHICH WERE "DUTIABLE", IF FROM UNITED KINGDOM.

Value of goods cleared for consumption ..	£ 16,035,600	10,093,908	10,889,895	11,405,731	14,404,275	15,000,170
Amount of Duty collected thereon ..	£ 2,952,024b	3,343,596b	3,662,020b	4,354,743	5,326,147	6,002,310
Average <i>ad valorem</i> rate of Duty collected ..	% 18.4	17.5	18.1	38.0	37.0	38.1
Duty which would have been collected on United Kingdom goods under General Tariff rates ..	£ 5,375,189	6,809,612	7,145,011	..	..	..

EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS
TARIFF—continued.

Particulars.	United Kingdom.			Other Countries.(a)		
	1933-34.	1934-35.	1935-36.	1933-34.	1934-35.	1935-36.
GOODS OF A KIND WHICH WERE "DUTIABLE", IF FROM UNITED KINGDOM.						
Average <i>ad valorem</i> rate of Duty which would have been collected under General Tariff rates ..	%	33.5	35.7	37.4	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff ..	£	2,426,292b	2,833,030b
Average <i>ad valorem</i> rate of Duty which would have been collected under British Preferential Tariff ..	%	21.2	19.7
Amount of Rebate on United Kingdom goods as against General Tariff rates ..	£	2,423,165b	3,466,016b	3,782,091b	..	..
Average <i>ad valorem</i> rate of Rebate on United Kingdom goods ..	%	15.1	18.2	19.0	..	..
Amount of Surcharge on goods from Other Countries as against British Preferential Tariff rates ..	£	1,928,451b	2,493,117b
Average <i>ad valorem</i> rate of Surcharge on goods of Other Countries ..	%	16.8	17.3
					10.2	
(a) Goods cleared under "General Tariff" (b) See note (b) at end of table.						

TOTAL GOODS—"FREE" AND "DUTIABLE," AFFECTED BY THE BRITISH PREFERENTIAL
TARIFF.

Value of goods cleared for consumption ..	£	29,345,115	35,343,229	39,079,846	18,197,266	24,208,573	28,628,946
Amount of Duty collected thereon ..	£	2,952,024b	3,343,596b	3,602,020b	5,410,404	6,947,642	8,105,704
Average <i>ad valorem</i> rate of Duty collected ..	%	10.1	9.5	9.3	29.8	28.7	28.3
Duty which would have been collected on United Kingdom goods under General Tariff rates ..	£	7,387,291	9,079,971	10,173,549	..	..	..
Average <i>ad valorem</i> rate of Duty which would have been collected under General Tariff rates ..	%	25.2	25.7	26.0	..	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff ..	£	..	..	..	2,426,292b	2,833,030b	3,023,170b
Average <i>ad valorem</i> rate of Duty which would have been collected under British Preferential Tariff ..	%	..	..	..	13.3	11.7	..
Amount of Rebate on United Kingdom goods as against General Tariff rates ..	£	4,435,267b	5,736,375b	6,510,629b	..	..	..
Average <i>ad valorem</i> rate of Rebate on United Kingdom goods ..	%	15.1	16.2	16.7	..	..	..
Amount of Surcharge on goods from Other Countries as against British Preferential rates ..	£	..	..	..	2,993,112b	4,114,612b	5,082,534b
Average <i>ad valorem</i> rate of Surcharge on goods of Other Countries ..	%	..	..	..	16.5	17.0	17.7

(a) Goods cleared under "General Tariff." (b) In computing this amount, account has been taken of the effect of the Exchange Adjustment Act on the margin of British Preference.

NOTE.—For the purpose of the above analysis the value of imports is stated in Australian currency.

VALUE OF TOTAL TRADE, EXPORTS AND IMPORTS, AUSTRALIA 1826 TO 1935-36.
(Including Gold).



(See page 500.)

EXPLANATION.—The base of each square represents an interval of two years, and the vertical height ten million pounds sterling for imports and exports, and twenty million pounds sterling for total trade.

VALUES PER HEAD OF POPULATION OF TOTAL TRADE, EXPORTS AND IMPORTS
—AUSTRALIA, 1826 TO 1935-36.

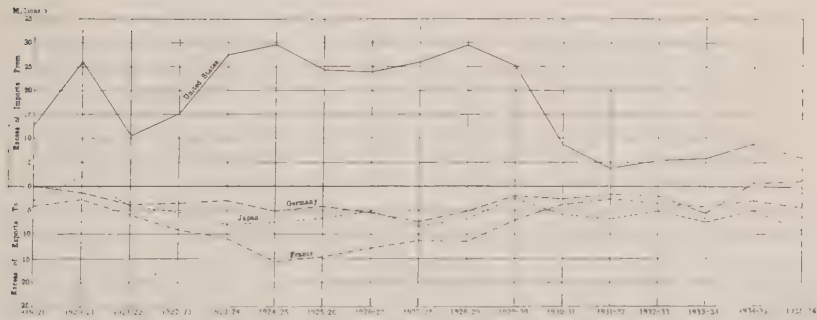
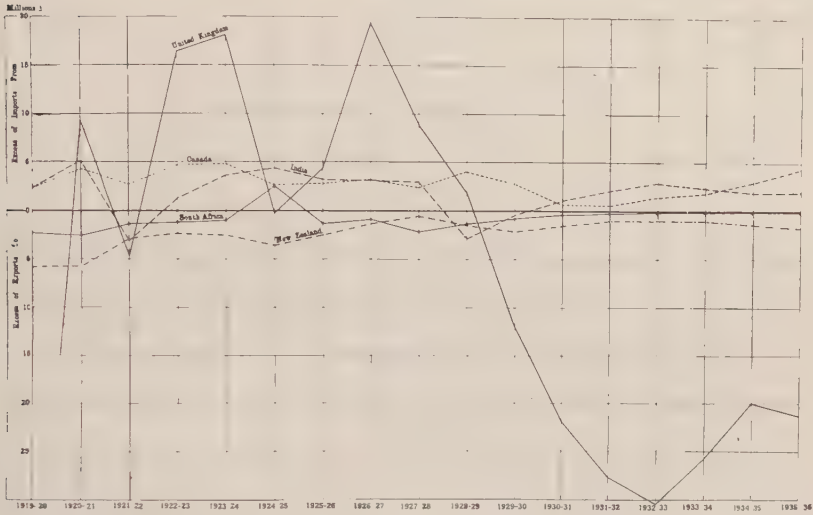
(Including Gold).



(See page 500.)

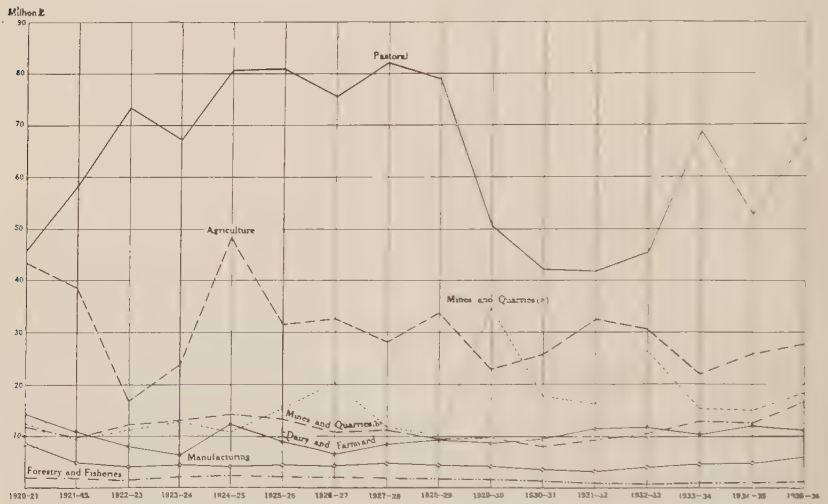
EXPLANATION.—The base of each square represents an interval of two years, and the vertical height £2 10s. od. per head of the population.

BALANCE OF AUSTRALIAN TRADE WITH OTHER COUNTRIES, 1919-20 TO 1935-36,
(Including Gold).



EXPLANATION. — The base of each square or rectangle represents one year, and the vertical height five million pounds sterling.

EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIES 1920-21 TO 1935-36.



EXPLANATION.—Mines and Quarries (a) represents the total exports of the produce of this industry, including bullion and specie.

Mines and Quarries (b) represents the export of products other than Gold, to which is added the value of gold produced in the respective years.

(ii) *Exchange Adjustment*. The Customs Tariff (Exchange Adjustment) Act 1933-1936 provides for adjustments in Duties of Customs, consequent upon depreciation in the value of Australian currency in relation to the currencies of countries, to goods on which the British Preferential Tariff applies. This Act came into operation on 5th October, 1933, but subsequent amendments have extended the list of items affected. The application of Section 5 of the Act is explained hereunder :—

The deduction to be made from duty in respect of protected goods (covered by items) specified in the schedule to the Act and admissible under the British Preferential Tariff on account of the depreciation of Australian currency in relation to the currency of the British country exporting the protected goods to Australia will depend on—

- (a) Whether the extent of depreciation is not less than $16\frac{2}{3}$ per cent ; or
- (b) Whether the extent of depreciation is not less than 11 1-9 per cent., and less than $16\frac{2}{3}$ per cent.

If (a) applies, the deduction from the amount of duty will be—(i) one-fourth of the amount of duty ; or (ii) $12\frac{1}{2}$ per cent. ($\frac{1}{4}$) of the value for duty, whichever is the less :

If (b) applies, the deduction will be (i) one-eighth of the amount of duty ; or (ii) $6\frac{1}{4}$ per cent. of the value for duty, whichever is the less. The telegraphic transfer (buying) rate shall determine the extent of depreciation of Australian currency.

Prior to 1933-34 the Tariff Board had recommended rates of duty as though exchange was at par, but early in the year mentioned the Board decided to change the basis of its recommendations and has since shown its findings under the following headings :—

- (a) The rates which would prove reasonable and adequate under existing conditions of exchange.
- (b) An estimate as closely as can be made of the rates which would be reasonable and adequate if exchange suddenly reverted to par.
- (c) The scale of adjustment necessary to meet conditions of exchange between parity and the present adverse rate of 25 per cent.

In tariff proposals introduced on 6th December, 1934 and later, the new basis has been adopted in fixing rates of duty on certain items in accordance with the Board's recommendations as set out in (a) with provision for the adjustment of rates of duty as set out in (c). With respect to such items the deductions under the provisions of the Exchange Adjustment Act will cease to apply.

(iii) *Papua and New Guinea Preference*. The Customs Tariff (Papua and New Guinea Preference) 1936 which repealed the Act of 1934 provides for Customs Preference on goods the produce of Papua and on goods the produce of the Territory of New Guinea. Imports into Australia direct from the Territory of Papua or the Territory of New Guinea, of such of the goods specified in the schedule to the Act as were produced in the Territory from which they were imported, shall, notwithstanding anything contained in the Customs Tariff 1933-1939 be free of duty. The goods specified in the schedule to the Customs Tariff (Papua and New Guinea Preference) 1936 are coffee, dried lychee fruit, various native fresh fruits, edible fungi, green and dry ginger, coconuts, Rangoon beans, lupok and sesame seeds, areca nuts, cocoa beans, massoi oil, nuts (edible), sago, tapioca, spices, vanilla beans and gums. Total imports from Papua during 1935-36 amounted to £177,599, imports of goods entitled to preference to £42,662, and duties remitted to £40,695. Total imports from the Territory of New Guinea during 1935-36 amounted to £1,401,174 including gold £1,283,755, imports of goods entitled to preference to £53,700, and the duties remitted to £43,877.

5. *Reciprocal Tariffs*.—(i) *General*. The Customs Tariff of 1921 introduced a new feature into Australian Tariffs in the form of an Intermediate Tariff. No provision was made in the Customs Tariffs 1933 for an intermediate tariff but in the Customs Tariff 1936 this feature was restored. The purpose of the intermediate tariff is referred to in § 2 par. 2.

The trade agreement signed at the Imperial Economic Conference, 1932, held at Ottawa, Canada, on behalf of the Government of the United Kingdom and of the

Government of the Commonwealth of Australia materially altered the existing conditions of preference. The agreement provides special preferential trade conditions between the Commonwealth of Australia and the United Kingdom and certain of its dependencies. Customs Tariff 1933 embodied the main provisions of the Ottawa Agreement, and imposed duties of customs under two headings—British Preferential Tariff and General Tariff. No provision was made for an Intermediate Tariff in the abovementioned Act. The terms of the agreement conceded by the Commonwealth Government are briefly stated in § 2 par. 4 and the concessions granted by the Government of the United Kingdom on goods of Australian origin are set out in § 2 par. 6 of this chapter. A review of the trade agreement will be found in the Appendix to Official Year Book No. 26, 1933.

(ii) *Union of South Africa.* The Commonwealth Customs Tariff (South African Preference) Act 1906 and subsequent amending Acts which provided preferential rates of duty upon goods produced within the South African Customs Union were repealed from 1st July, 1926, by the Customs Tariff 1926.

A new trade agreement took effect from 1st July, 1935. This agreement provides that the products of the Union of South Africa or the mandated territory of South-West Africa entering Australia and the products of Australia entering the Union of South Africa or the mandated territory of South-West Africa shall be subject to customs duties not higher than those imposed by the importing country on like products from the most favoured foreign nation. A reciprocal tariff arrangement under which products of Mozambique are admitted duty free to the Union of South Africa is exempt from the agreement.

(iii) *Dominion of New Zealand.* The Customs Tariff (New Zealand Preference) Act 1933, which came into force on 1st December, 1933, repealed earlier Acts and provides that duties on all goods specified in the schedule to the Act shall be at the rates indicated therein, and that all goods other than those provided for in the schedule shall be subject to the rates in force under the British Preferential Tariff. An amendment to this Act in 1934 provides that, where the rate of duty upon any class of goods under the New Zealand British Preferential Tariff is less than that operating in Australia under the British Preferential rate, upon request by the New Zealand Government such goods may, after proclamation, be admitted at the lower rate. The rates of duty on goods re-exported from New Zealand (not being goods the produce or manufacture of New Zealand) and which are imported into Australia, and upon which if they had been imported into Australia direct from the country of origin would have been subject to the rates of duty under the British Preferential Tariff, shall be the rates of duty in force under that tariff.

The Act provides also that films produced in New Zealand by or for the Government of New Zealand for publicity purposes shall be admitted free of duty, also that cocoa beans the produce of Western Samoa shall not be subject to any higher duties than those paid on cocoa beans the produce of any British non-self-governing Colony or Protectorate or any Territory under British mandate. Nothing in the Act shall apply to goods being the produce of Cook Islands.

Goods the produce or manufacture of the Dominion of New Zealand are exempt from primage duty.

The conditions of preference in the Act provide that goods shall be deemed to be the produce or manufacture of New Zealand if they conform to the laws and regulations in force in Australia which apply to such goods when imported under the British Preferential Tariff (*vide* section 151A of Customs Act 1901-1936) except that goods not wholly produced or manufactured in New Zealand need not contain more than 50 per cent. of New Zealand labour and/or material in their factory or works cost, instead of 75 per cent. under the conditions of the United Kingdom preference.

Of the total imports of £1,773,250 from New Zealand during 1935-36 it is estimated that goods otherwise dutiable amounting in value to £562,950 were admitted free under the provisions of the Preferential Tariff and the duty thus remitted was £319,412. In addition, goods valued at £43,951 were admitted under the preferential rates of duty, the duty remitted on such goods being £10,122. The total of the duties remitted

on the import of New Zealand goods was thus £329,534, representing a margin of preference of 54.3 per cent. on the value of the goods entitled to preference. The principal items which benefited under the preferential provisions were undressed timber, valued at £315,951, and fish, £170,382, the amounts of duty remitted being £251,944 and £13,604 respectively.

(iv) *Dominion of Canada.* A reciprocal trade treaty between Canada and Australia was effected in September, 1925, and a reciprocal Tariff agreement between the two countries came into operation on 1st October, 1925. The Customs Tariff (Canadian Preference) Acts 1931, 1934 and 1936 reaffirmed the principle of granting preferences for their mutual advantage and extended preferential conditions. The commodities on which Canada grants preferential rates of duty to Australia are: Beeswax, butter, brandy, champagne, cheese, currants, eggs, eucalyptus oil, fruits (dried, fresh and pulped), fruits in cans, gelatine, glue, honey, hops, lard, meat (fresh and canned), onions, raisins, sugar, tallow, vegetables in tins, veneers and wine. Australia's preferential duties apply to the following Canadian imports: Carbide of calcium, cash registers, caskets, fish, gloves, goloshes and rubber sand boots, etc., iron and steel tubes or pipes, printing machinery, barbed wire, paper (printing, typewriting and writing), timber, typewriters, vacuum cleaners and vehicles—motor chassis (unassembled and assembled) and vehicle parts but not including rubber tyres and tubes, storage batteries, shock absorbers, bumper bars, sparking plugs and springs.

During 1935-36 the imports from Canada amounted in Australian currency to £6,733,253 and imports of Canadian origin entitled to preference were valued at £4,955,285, the principal items being motor chassis and parts, £1,734,387; printing paper, £827,902; timber, £627,235; fish, £386,653; and piece goods, £218,021. The duty on the total imports of Canadian origin entitled to preference would have been £1,957,032 under the General Tariff, but by the preferential provisions this was reduced by £1,265,630, or by 25.5 per cent. on the value of the imports concerned.

Australian exports to Canada subject to preference amounted to approximately £700,000, the principal items being dried fruits, £496,126; fruits, preserved, £62,464; tallow, £34,766; gelatine and glue, £32,547; sugar, £25,238; and wine, £13,495.

6. *Preferential Tariff of the United Kingdom.*—The post-war Tariff of the United Kingdom provides Preferential Customs rates on certain goods where it is shown to the satisfaction of the Commissioners of Customs and Excise that such goods have been consigned from and grown, produced, or manufactured in the British Empire. Manufactured articles generally are not entitled to the preferential rates unless a specified percentage of their value is the result of labour within the British Empire. The principal items of interest to Australia which are accorded preferential treatment under this Tariff are:—Fruits, dried and preserved; jam; fruit pulp; preserved milk; wine; and brandy. In the Budget submitted to the House of Commons during June, 1925, clauses dealing with increased Imperial preference on Empire-grown tobacco, preserved and dried fruits, jams and jellies, spirits, wine, sugar and hops were proposed and adopted. The new rates of duty took effect on 1st July, 1925, excepting that relating to hops, which came into operation on 16th August, 1925.

Conditions of preference to goods of Australian origin imported into the United Kingdom were revised in the trade agreement signed at the Ottawa Imperial Economic Conference. Increased preference was granted and the list of commodities entitled to preference was extended. This agreement provides that for eggs, poultry, butter, cheese and other milk products free entry for produce of Australia will be continued for three years certain. Article 2 of the agreement provides that the British Government will invite Parliament to pass the legislation necessary to impose on foreign goods specified in Schedule B, the duties of customs specified therein in place of the duties (if any) now leviable. The goods and duties in Schedule B are as follows:—Wheat in grain, 2s. per quarter; butter, 15s. per cwt.; cheese, 15 per cent. *ad valorem*; apples, raw, 4s. 6d. per cwt.; pears, raw, 4s. 6d. per cwt.; apples, canned, 3s. 6d. per cwt., in addition to duty in respect of sugar content; other canned fruits, 15 per cent. *ad valorem*, in addition to duty in respect of sugar content; dried fruits, now dutiable at 7s., 10s. 6d. per cwt.; eggs in shell, (a) not exceeding 14 lb. per great 100, 1s. per great 100; (b) over

14 lb. but not exceeding 17 lb., 1s. 6d. per great 100; (c) over 17 lb., 1s. 9d. per great 100; condensed milk, whole, sweetened, 5s. per cwt., in addition to duty in respect of sugar content; condensed milk, whole, not sweetened, 6s. per cwt.; milk powder and other preserved milk, not sweetened, 6s. per cwt.; honey, 7s. per cwt.; copper, unwrought, whether refined or not, in ingots, bars, etc., 2d. per lb.; oranges, raw, 3s. 6d. per cwt. from 1st April to 30th November; grape fruit, raw, 5s. per cwt., from 1st April to 30th November; and grapes (other than hothouse) 1½d. per lb. from 1st February to 30th June. Schedule C provides that the margin of preference on wine not exceeding 27 degrees of proof spirit shall be 2s. per gallon.

The British Government undertake that the general *ad valorem* duty of 10 per cent. imposed by Section 1 of the Import Duties Act 1932 on the following foreign goods shall not be reduced except with the consent of the Commonwealth Government:—Leather, tallow, canned meat, zinc, lead, barley, wheaten flour, macaroni, dried peas, dressed poultry, casein, eucalyptus oil, meat extracts and essences, copra, sugar of milk, sausage casings, wattle bark, asbestos and dried fruits other than currants.

The duties provided on foreign wheat in grain, copper, lead and zinc are conditional on Empire producers continuing to offer these commodities on first sale in the United Kingdom at prices not exceeding the world price.

During the Calendar year 1935 Merchandise of Australian origin imported into United Kingdom amounted to £54,286,000. Of this total approximately £27,896,000 represented goods which received preferential tariff treatment over similar goods from foreign countries. If these goods had been subject to the duties imposed on foreign goods it is estimated that they would have paid approximately £5,264,000 more in duty. This represents a rebate of approximately 18.9 per cent. on the value of imports receiving preferential treatment. The main items receiving preference and the amount of the rebates were:—Butter, £8,388,000 (rebate, £1,585,000); wheat, £5,370,000 (rebate, £413,000); sugar, £1,944,000 (rebate, £920,000); apples, £1,701,000 (rebate, £344,000); raisins, £722,000 (rebate, £186,000); and wine, £579,000 (rebate, £664,000). The above figures for imports have been obtained from the *Annual Statement of the Trade of the United Kingdom* 1935, and the rebate granted has been estimated from rates of duty shown in the Import Duties Act 1932, Ottawa Agreements Act 1932 and the other enactments mentioned above.

The declaration by the British Government (Schedule H of the agreement) provides for the regulation of foreign meat into the United Kingdom and undertakes that no restriction will be placed upon the importation of any meat from Australia during the period (January 1933 to June 1934) named in the "agreed programme" which is set out in Schedule H.

The views of the Government of the United Kingdom on the imports of meat into the United Kingdom were the subject of a paper presented to the House of Representatives in April, 1935. In a memorandum on "The Livestock Situation" issued as a White Paper in July, 1934, the United Kingdom Government called attention to the very serious decline which had taken place in 1932, 1933 and the first half of 1934, in the prices of fat and store cattle in the United Kingdom market. The decline was attributed in the main to the disproportionate fall of agricultural prices as the result of the World depression and the effect on the meat industry of the expansion of overseas production which in some cases was stimulated by the payment of subsidies. The United Kingdom Government added that it was clearly impossible for that Government to acquiesce in a situation which threatened ruin to the United Kingdom livestock industry and explained that the choice lay between—

- (a) a drastic reduction of imports to the point necessary to sustain prices of United Kingdom livestock at a remunerative figure; or
- (b) the introduction in agreement with overseas countries of a levy upon imports the proceeds of which would be available for the assistance of the home industry.

In the latter case, it was explained, the quantity of imports might either be left entirely free or subjected to such moderate regulation as might be thought necessary to prevent the market from breaking altogether. It was further pointed out that, without

the consent of the countries concerned, no duty could be imposed on Dominion meat before August, 1937, or on Argentine meat before November, 1936. Failing agreement on the payment of a levy on meat imports the United Kingdom Government would have no alternative but to take steps to regulate, during the currency of existing agreements, the quantity of imports to whatever extent was necessary to restore livestock prices to a remunerative level.

In summing up the position the United Kingdom Government stated that it was the firm intention of His Majesty's Government in the United Kingdom to safeguard the position of the United Kingdom livestock industry.

The arrangements with the United Kingdom provide for importations of Australian meat regulated in accordance with the absorptive capacity of the United Kingdom market. Australian meat importations into the United Kingdom during the last three years as compared with the Ottawa agreement year (1931-32) have been as follows:—

	Chilled Beef.	Frozen Beef and Veal.	Frozen Mutton and Lamb.	Pork.
	Cwt.	Cwt.	Cwt.	Cwt.
1931-32	Nil	1,124,000	1,488,000	Nil
1934	55,000	1,599,000	1,627,000	82,000
1935	228,000	1,468,000	1,784,000	147,000
1936	296,000	1,512,000	1,499,000	233,000

It is anticipated that shipments from Australia for the year 1937 will exceed those of any previous year.

In this connexion it will be of interest to compare the terms of the United Kingdom-Argentina Trade Agreement which took effect from 20th November, 1936. This Agreement provides for "minimum annual quantities" of Argentina meat to be imported into the United Kingdom as follows:—Chilled beef for year 1937 not less than quantity imported in 1935 reduced by 138,700 cwt. For each of the years 1938 and 1939 not less than the quantity permitted in the preceding year reduced by 138,700 cwt. provided that the 1939 quantity shall be not less than 6,590,000 cwt. Frozen beef 124,600 cwt., pork 186,800 cwt., and canned beef 605,600 cwt. annually. Mutton and lamb for year 1937, 886,000 cwt. and for 1938, 797,400 cwt. In addition, customs duty has been imposed as follows:—Chilled beef $\frac{3}{4}$ d. per lb., frozen beef $\frac{3}{4}$ d. per lb., canned beef (excluding tongues) 20 per cent. and tongues 30 per cent. ad valorem, pork, mutton and lamb, free. If in any period Argentina is unable to supply the minimum quantities specified the United Kingdom Government may re-allocate the shortage among other countries. The agreement will remain in force until 31st December, 1939, and thereafter until terminated by six months notice.

7. Trade Agreements.—(i) *Belgium*. An agreement executed on 19th November, 1934, between the Governments of Belgium and the Commonwealth of Australia permitted Belgium to supply a specified proportion of Australian requirements of plain, clear sheet glass in return for which the Belgian Government waived all restrictions upon the importation of Australian meat and agreed not to enforce an embargo on Australian cereals. This agreement continued in force until 1st January, 1937, when a new agreement came into operation. The quota arrangement with respect to Belgian glass is a feature of the new agreement which also provides for—

- (1) Reciprocal most favoured nation treatment.
- (2) The grant of intermediate tariff to Belgium in respect of 53 sub-items; an undertaking not to increase the duty on seven non-protective items; prime concessions on a number of items; remission of the revenue duty on outside packages operating on goods covered by nine items; an undertaking to refer a limited number of items to the Tariff Board for inquiry and report; and reclassification of certain sheet glass not manufactured in Australia

- (3) Consolidation of the present duty free entry into Belgium of Australian wool, sheepskins, hides and tallow, and consolidation of the duties on fresh apples and pears.
- (4) An undertaking by Belgium that Australian barley, wheat and frozen beef will not be prohibited.

The agreement is of indefinite duration and will remain in force until terminated by six months' notice from either Government.

(ii) *Czechoslovakia.* A trade agreement concluded between the Governments of Czechoslovakia and the Commonwealth of Australia came into force on 1st January, 1937. The actual commitments of the Commonwealth Government may be summarized as follows :—

- (1) The grant to Czechoslovakia of most favoured nation treatment covering import duties and charges on the importation into Australia of articles from Czechoslovakia.
- (2) The grant of an intermediate tariff rate on 44 items.
- (3) The continuance of by-law admission of certain steel which is of a type not manufactured in Australia.
- (4) Remission of primage duty on a limited number of items.
- (5) An undertaking that prohibitions and restrictions shall not be discriminatory.
- (6) An undertaking to accord equitable treatment to Czechoslovakian goods should quantitative regulation of imports be maintained or adopted.

The undertakings given in paragraphs 1, 5 and 6 are reciprocal in their application. Czechoslovakia on its part undertakes to grant duty free admission to wool, sheepskins, rabbit skins and pearlshell ; to consolidate the existing low duties on lead ; and to grant a reduction of duty on apples.

The agreement is for one year but will continue thereafter until terminated by three months' notice of denunciation.

(iii) *France.* A trade agreement between the Governments of France and the Commonwealth of Australia came into force on 1st January, 1937. Briefly stated the concessions granted to France by the Commonwealth Government are as follows :—

- (1) A general pledge to accord France most favoured nation treatment with respect to customs duties by according to French products tariff treatment at least as favourable as that accorded to the products of the most favoured foreign country.
- (2) The grant of intermediate tariff rates on 90 tariff items or sub-items.
- (3) A reduction of primage duties on 72 tariff items or sub-items.
- (4) An undertaking to refer 16 items to the Tariff Board for inquiry and report.
- (5) A consolidation for the minimum period of the agreement—one year—of the duties on high-power insulators for use in the manufacture of electric switch-gear and transformers.

In return for the concessions granted by Australia, the French Government has agreed to accord the following benefits to Australian exports :—

- (1) The grant of the French minimum tariff duties on 20 items. Wool, hides and skins, wheat, barley, apples, meat, and metals are included in the list.
- (2) The abolition of the special retaliatory duties of 200 per cent. of the French maximum tariff on butter and wheat.
- (3) The abolition of exchange surtax of 15 per cent. *ad valorem* on all Australian goods.
- (4) The reduction of the import tax on Australian products to a flat rate of 2 per cent. This tax which is similar to primage formerly ranged from 2 per cent. to 6 per cent.

The agreement has been made for one year but will continue thereafter until terminated by two months' notice from either Government.

While French quota restrictions remain, the grant of French minimum tariff duties on 20 items does not necessarily mean that the way is open for large imports of those commodities to France. For some items the French Government has been unable to

grant quotas but has undertaken to examine with goodwill any request from the Commonwealth Government for a percentage of the global quota. Australian barley and apples are exceptions, the annual quota for barley having been fixed at 20,000 quintals, and for apples at 64,500 bushel cases.

(iv) *Japan*. A trade agreement between the Governments of Japan and the Commonwealth of Australia came into operation on 1st January, 1937. The agreement provides for a reduction of the Australian intermediate tariff rate on artificial silk piece goods, and the intermediate tariff rates on piece goods of unbleached cotton, bleached cotton, and printed, dyed or coloured cotton. In all, Japan has been conceded the benefit of the intermediate tariff on 11 items from which primage duty has also been removed. Under the terms of the agreement the quantity of Japanese piece goods to be imported into Australia is limited to 102,500,000 square yards per annum, divided equally between artificial silk and cottons. The cotton piece goods will be exclusive of calico for bag-making which as in the past will be admitted without restriction.

In return the Government of Japan will issue permits for the import during the eighteen months ending June, 1938, of 800,000 bales of Australian wool, or at the rate of 533,000 bales per annum.

The agreement further provides that each country will remove immediately the special prohibitions which have been imposed against the imports of the other and that Japan will also withdraw the operation of the super duties imposed against certain Australian products.

The agreement will operate for 18 months from 1st January, 1937.

8. *Sanctions Act 1935*.—The Sanctions Act 1935 relating to the application of sanctions against Italy during the war with Abyssinia was assented to on 15th November, 1935. On 18th November, 1935, the Commonwealth Government, acting under the authority of section 6 of the Act, prohibited by regulation imports from Italy and certain specified exports to Italy. The prohibitions continued until 15th July, 1936, from which date the Sanctions Act 1935 was repealed by proclamation.

9. *Australian Trade Diversion*.—On 22nd May, 1936, Sir Henry Gullett, Minister directing negotiations for Trade Treaties, announced in the House of Representatives the decision of the Government to divert portion of Australia's import trade, with the object of increasing exports of primary produce, expanding secondary industry, and bringing about an increase of rural and industrial employment.

Briefly summarized the Minister's statement indicated that certain imports would be restricted with a view to their manufacture in Australia, including motor chassis, which, it was hoped, would be made in Australia on a large scale within a few years. In the case of certain other imports it was intended to divert them from their present sources of supply to other countries which were great customers of Australia and which it was expected would become greater customers if Australia increased her purchases from them. The Government would proceed in two ways, firstly, by the adoption of a special licensing system over a limited range of imports and, secondly, by the imposition of higher duties where this course appeared more desirable. With the exception of motor chassis all goods of British origin would be exempt from the licensing system. In the case of motor chassis imports of United Kingdom origin only would be exempt from restriction. Upon application licences would be freely granted to countries with which Australia had a favourable balance of trade and to all other countries in regard to which, although the balance might be adverse to the Commonwealth, the Government was satisfied with the position.

The special licensing system was introduced on 23rd May, 1936, in the form of an amendment to the Customs (Prohibited Imports) Regulations which prohibited the import, except under special licence, of 84 classified groups of goods from foreign countries. A list of the principal items affected and a reference to restrictions imposed on the import of motor chassis will be found in § 2 par. 2 of this chapter.

10. *United States of America—Australian Trade Relations*.—The trade diversion policy of the Commonwealth Government as expressed by the prohibition, except under special licence, of specified imports as from 23rd May, 1936, adversely affected a wide range of goods from the United States of America, which for a number of years had enjoyed an extremely favourable trade balance with Australia. In reply to this action

the United States Government withdrew as from 1st August, 1936, the most favoured nation treatment hitherto accorded to Australian goods including certain trade benefits extended to Australia equally with a number of countries with which the United States had concluded trade agreements. A further step bearing on the trade relations between the two countries was the extension by the Commonwealth Government to "proclaimed countries" as from 1st January, 1937, of intermediate customs tariff rates and certain primage duty concessions. The list of "proclaimed countries" includes the United Kingdom, the Dominions and Colonies, and the principal foreign countries but does not include the United States.

11. Restriction of Imports into Japan.—An Imperial Ordinance, No. 124 of 1936, affecting the trade of Australia with Japan was promulgated on 25th June, 1936, by the Government of Japan.

Article I. of the Ordinance states that in accordance with the provisions of Article I. of Law No. 45 of 1934, goods produced or manufactured in countries which are applying at the date of the present Ordinance "unreasonable restrictive measures in respect of the importation of goods produced or manufactured in Japan" shall not be imported into Japan for the duration of one year except with the permission of the competent Minister of State who shall proclaim the countries referred to. List "A" of the Ordinance limits the articles prohibited to wheat, flour and wool.

Article II. of the Ordinance imposes an import duty of 50 per cent. ad valorem in addition to the Import Tariff annexed to the Customs Tariff Law for the duration of one year on articles produced or manufactured in countries proclaimed. List "B" of the Ordinance restricts the provisions of Article II. to beef, butter, condensed milk, hides and skins, beef tallow, and casein.

In a proclamation of the Department of Finance and the Department of Commerce and Industry of 25th June, 1936, the country referred to in Imperial Ordinance No. 124 of 1936 is proclaimed as "Commonwealth of Australia."

The restrictions imposed by Imperial Ordinance, No. 124 of 1936, were abolished as from 1st January, 1937, under the terms of the trade agreement concluded between the Governments of Japan and the Commonwealth of Australia.

12. Tariff Board.—The Tariff Board Act 1921-1934 provides for the appointment of a Tariff Board consisting of four members, one of whom shall be an administrative officer of the Department of Trade and Customs. This member may be appointed Chairman of the Board. Members of the Board are appointed for a term of not less than one year nor more than three years, and two members may be appointed as a Committee for making special inquiries. The purpose of the Tariff Board is to assist the Minister in the administration of matters relating to trade and customs. The more important matters which the Minister shall refer to the Board for inquiry and report include disputes arising out of the interpretation of any Customs or Excise Tariff; the necessity for new, increased or reduced duties; the necessity for granting bonuses; any proposal for the application of the British Preferential Tariff to any part of the British Dominions or any foreign country; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the tariff by charging unnecessarily high prices for his goods or acting in restraint of trade. The Minister may refer to the Board for inquiry and report the following matters:—the classification of goods under items of the Tariff that provide for admission under By-laws; the determination of the value of goods for duty; the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial effects of the Customs laws of the Commonwealth; the incidence between the rates of duty on raw materials and on finished or partly finished products; and any other matter affecting the encouragement of primary and secondary industries in relation to the Tariff.

Inquiries conducted by the Board relating to any revision of the Tariff, any proposal for a bounty, or any complaints that a manufacturer is taking undue advantage of the protection afforded him by the Tariff shall be held in public, and evidence in such inquiries shall be taken in public on oath, unless any witness objects to giving any evidence in public which the Board is satisfied is of a confidential nature, when the Board may take such evidence in private. Evidence taken by the Board in connexion with any inquiry under the Customs Tariff (Industries Preservation) Act 1921-1930 shall be taken in public on oath.

The latest "Annual Report of the Tariff Board," issued in accordance with Section 18 (1) of the Tariff Board Act 1921-1934 reviews the work of the Board during the year ended 30th June, 1936. During the year the Board furnished 90 reports to the Minister for Trade and Customs, and of these reports 72 related to matters on which public inquiries had been held. The subjects dealt with comprised:—Tariff revision, 50; question of inclusion under or removal from by-law, 20; tariff revision combined with requests for admission under or removal from by-law, 1; and necessity for payment of bounty, 1. Questions regarding the bringing into operation of deferred duties provided in the Customs Tariff which did not necessitate the holding of public inquiries were dealt with in 18 reports. At 30th June, 1936, the Board had on hand 78 subjects on which reports had not been furnished to the Minister.

The report of the Board for the year ended 30th June, 1935, directed attention to the Tariff revision effected on the principles formulated in the United Kingdom and Australia Trade Agreement of 1932, and briefly summarized the more important of these changes.

The Minister for Trade and Customs on 14th December, 1932, referred to the Tariff Board for public inquiry and report the question as to the practicability of evolving some method of varying duties imposed under protective items of the Customs Tariff to meet the operation of exchange and primage. The recommendation of the Board regarding exchange adjustment was embodied in Customs Tariff (Exchange Adjustment) Act 1933. In regard to primage duty, the Board reaffirmed its recommendation to the Minister, dated 5th August, 1932, that primage duty should be removed from protective items in the Tariff Schedule, and suggested the adoption of such recommendation so soon as the Government considered that revenue considerations permitted.

13. Industries Preservation.—The Customs Tariff (Industries Preservation) Act 1921-1936 provides that after inquiry and report by the Tariff Board, special duties shall be collected in the following cases when the importation of the goods referred to might be detrimental to an Australian industry:—In the case of goods sold for export to Australia at a price less than the fair market price for home consumption or at a price which is less than a reasonable price, a special dumping duty shall be collected equal to the difference between the price at which the goods were sold and a fair market price. Similar provision is made for goods consigned to Australia for sale. With regard to goods exported to Australia at rates of freight less than the normal rate of freight the dumping freight duty shall be—on goods carried free—the amount payable as freight at the normal rate; and in the case of any other goods—an amount equal to the difference between the freight paid and the freight which would have been payable at the normal rate. Special duties are also imposed in the case of goods imported from countries whose currency is depreciated. Provision is also made for the protection of the trade of the United Kingdom in the Australian market from depreciated foreign currency.

The Act provides that the Minister for Trade and Customs, after inquiry and report by the Tariff Board, may publish a notice in the *Commonwealth Government Gazette* specifying the goods upon which special rates of duty under this Act shall be charged and collected. Several amendments of the Act were recommended by the Tariff Board and put into effect by the Customs Tariff (Industries Preservation) Act 1922. The Customs Tariff (Industries Preservation) Act 1933 repeals section 8 of Act 1921-1922 and provides new clauses relating to Exchange Special Duty.

14. Trade Descriptions.—The Commerce (Trade Descriptions) Act 1905 as amended by the Acts of 1920, 1930 and 1933 gives power to compel the placing of a proper description on certain prescribed goods, or on packages containing the same, being imports or exports of the Commonwealth. The goods to which a trade description must be applied are:—(a) Articles used for food or drink by man, or used in the manufacture or preparation of articles used for food or drink by man; (b) medicines or medicinal preparations for internal or external use; (c) manures; (d) apparel (including boots and shoes), and the materials from which apparel is manufactured; (e) jewellery; (f) seeds and plants; and (g) brushware.

15. Acts passed in 1936.—The following Acts relating to Australian production and trade were assented to during the year 1936:—

Wheat Growers Relief Act, No. 2 of 1936. An Act to provide for financial assistance to the States in the provision of relief to wheat growers.

- Primary Producers Relief Act, No. 3 of 1936. An Act to amend the Primary Producers Relief Act 1935.
- Apple and Pear Bounty Act, No. 4 of 1936. An Act to provide for the payment of a bounty on the export of apples and pears from the Commonwealth.
- Orange Bounty Act, No. 5 of 1936. An Act to provide for the payment of a bounty on the export of oranges from the Commonwealth.
- Prune Bounty Act, No. 6 of 1936. An Act to provide for the payment of a bounty on the export of prunes from the Commonwealth.
- Meat Export Control Act, No. 7 of 1936. An Act to amend the Meat Export Control Act 1935.
- Customs Tariff, No. 14 of 1936. An Act relating to duties of customs.
- Customs Tariff (Exchange Adjustment) Act, No. 15 of 1936. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-34.
- Customs Tariff (Canadian Preference), No. 16 of 1936. An Act to amend the Customs Tariff (Canadian Preference) 1934.
- Excise Tariff, No. 17 of 1936. An Act relating to duties of excise.
- Wool Publicity and Research Act, No. 24 of 1936. An Act to make provision for improving and increasing the production and use of wool.
- Dairy Produce Export Control Act, No. 26 of 1936. An Act to amend sections eight, fourteen and fifteen of the Dairy Produce Export Control Act 1924-35.
- Prune Bounty Act (No. 2), No. 43 of 1936. An Act to amend the Prune Bounty Act 1936.
- Orange Bounty Act (No. 2), No. 44 of 1936. An Act to provide for the payment of a bounty on the export of oranges from the Commonwealth during 1936.
- Apple and Pear Bounty Act (No. 2), No. 46 of 1936. An Act to amend the Apple and Pear Bounty Act 1936.
- Customs Tariff Validation Act, No. 51 of 1936. An Act to provide for the validation of collections of duties of customs under Customs Tariff Proposals.
- Customs Tariff (Exchange Adjustment) Validation Act, No. 52 of 1936. An Act to provide for the validation of adjustments in duties of customs under Customs Tariff (Exchange Adjustment) Proposals.
- Customs Tariff (Canadian Preference) Validation Act, No. 53 of 1936. An Act to provide for the validation of collections of duties of customs under Customs Tariff (Canadian Preference) Proposals.
- Trade Agreement (Czechoslovakia) Act, No. 56 of 1936. An Act to approve a Treaty of Commerce made between the Commonwealth of Australia and the Czechoslovakian Republic.
- Trade Agreement (Belgium) Act, No. 57 of 1936. An Act to approve a Provisional Commercial Agreement between the Government of the Commonwealth of Australia and the Government of Belgium.
- Trade Agreement (South Africa) Act, No. 58 of 1936. An Act to ratify and approve an Agreement between His Majesty's Governments in the Union of South Africa and the Commonwealth of Australia.
- Trade Commissioners Act, No. 64 of 1936. An Act to amend the Trade Commissioners Act 1933.
- Customs Tariff (No. 2), No. 68 of 1936. An Act relating to duties of customs.
- Customs Tariff (Exchange Adjustment) Act (No. 2), No. 69 of 1936. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-34 as amended by the Customs Tariff (Exchange Adjustment) Act 1936.
- Customs Tariff (Canadian Preference) (No. 2), No. 70 of 1936. An Act to amend the Customs Tariff (Canadian Preference) 1934 as amended by the Customs Tariff (Canadian Preference) 1936.
- Customs Tariff (No. 3), No. 76 of 1936. An Act relating to duties of customs.
- Customs Tariff (Exchange Adjustment) Act (No. 3), No. 77 of 1936. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-34 as amended by the Customs Tariff (Exchange Adjustment) Acts 1936 and (No. 2) 1936.

- Trade Agreement (France) Act, No. 79 of 1936. An Act to approve an Agreement contained in an exchange of notes between the Government of the Commonwealth of Australia and the Government of the French Republic.
- Customs Tariff (No. 4), No. 80 of 1936. An Act relating to duties of customs.
- Customs Tariff (Exchange Adjustment) Act (No. 4), No. 81 of 1936. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-34 as amended by the Customs Tariff (Exchange Adjustment) Acts 1936, (No. 2) 1936, and (No. 3) 1936.
- Customs Tariff (Industries Preservation) Act No. 82 of 1936. An Act to amend the Customs Tariff (Industries Preservation) Act 1921-1933.
- Papua and New Guinea Bounties Act, No. 83 of 1936. An Act to amend the Papua and New Guinea Bounties Act 1926.
- Customs Tariff (Papua and New Guinea Preference), No. 84 of 1936. An Act relating to duties of customs on goods imported into Australia from the Territory of Papua or the Territory of New Guinea.
- Customs Act, No. 85 of 1936. An Act to amend section 151A of the Customs Act 1901-1935 and to insert in that Act a new section 151B.
- Wine Overseas Marketing Act, No. 94 of 1936. An Act to amend the Wine Overseas Marketing Act 1929-1934 and for other purposes.

§ 3. Trade Representatives.

1. **Oversea.**—The Commonwealth of Australia is represented in the United Kingdom by the Right Hon. S. M. Bruce, C.H., M.C., High Commissioner, with headquarters at Australia House, London. Matters affecting the overseas trade of Australia come within the scope of the duties of the office.

The Commonwealth has a Trade Representative in France, with headquarters at Paris. This official is attached to Australia House, London.

The first appointment of a representative for Australia in the United States of America was made in 1918. The office of the Commissioner-General for Australia in the United States is vacant at present date. The Official Secretary, with headquarters at New York, attends to Australian affairs, including overseas trade matters.

In April, 1929, a Commercial Representative for Australia was appointed in the Dominion of Canada. Mr. L. R. McGregor, the present occupant of the office, was appointed on 1st March, 1930, under the designation of Australian Trade Commissioner in Canada, with headquarters at Toronto.

The Trade Commissioners Act 1933 provides for the appointment of one or more Trade Commissioners and Assistant Trade Commissioners of the Commonwealth in such places as the Governor-General determines. In April, 1934, the first appointment under the Act was made, Mr. R. H. Nesbitt being appointed Australian Trade Commissioner in New Zealand, with headquarters at Wellington. Mr. Nesbitt resigned in April, 1937, and was succeeded in July, 1937, by Mr. C. E. Critchley, formerly Australian Trade Commissioner in Netherlands East Indies. In May, 1935, Trade Commissioners and Assistant Trade Commissioners were appointed to Japan, China and Netherlands East Indies and in January, 1937, a Trade Commissioner was appointed to Egypt. The Trade Commissioners are—Japan, Lt.-Col. E. Longfield Lloyd, with headquarters at Tokio; China, Mr. V. G. Bowden, with headquarters at Shanghai; Netherlands East Indies, vacant; and Egypt, Col. C. E. Hughes, C.B.E., with headquarters at Cairo.

2. **In Australia.**—Trade Commissioners representing the undermentioned countries are located in Australia, viz.:—The United Kingdom, Canada, New Zealand, United States of America and France. His Majesty's Senior Trade Commissioner for the United Kingdom has his headquarters in Sydney and Trade Commissioners are located also at Melbourne and Brisbane. The New Zealand Government Representative and Trade Commissioner, the Senior Canadian Government Trade Commissioner and the Trade Commissioners for United States of America and France are located in Sydney. Trade matters affecting other overseas countries are generally attended to by their Consular representatives.

§ 4. Method of Recording Imports and Exports.

1. *Value of Imports.*—The recorded value of goods imported from countries beyond Australia as shown in the following tables represents the amount on which duty is payable or would be payable if the duty were charged *ad valorem*. The value of goods is taken to be 10 per cent. in advance of their fair market value in the principal markets of the country whence the goods were exported. Acting upon a recommendation of the Tariff Board the section of the Customs Act relating to the valuation of imports was amended, and Section 154 (1) of the Customs Act 1901–1936 now provides that “when any duty is imposed according to value, the value for duty shall be the sum of the following :—

- (a) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction, or
- (ii) the current domestic value of the goods, whichever is the higher ;
- (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export ; and
- (c) ten per centum of the amounts specified under paragraphs (a) and (b) of this sub-section.

“Current domestic value” is defined as “the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country.”

Imports are recorded in British currency values, and Section 157 of the Customs Act provides that when the invoice value of imported goods is shown in any currency other than British currency, the equivalent value in British currency shall be ascertained according to a fair rate of exchange to be declared in case of doubt by the Minister. Under this section it was the practice of the Department of Trade and Customs, until the 8th December, 1920, to convert on the basis of the mint par of exchange. Since the date mentioned, in consequence of a ruling of the High Court, all conversions have been based on the commercial rates of exchange.

The term “British currency values” is not exactly synonymous with “English sterling”, since imports already expressed in terms of £.s.d. are regarded for duty purposes as being expressed in British currency values. This exception to the general rule is chiefly important in the case of imports from New Zealand and the Union of South Africa, when their currencies are not at par with English currency. In all the tables in this volume no correction has been made on this account, even when for the sake of brevity the term “sterling” has been used as a contraction for “British currency values.”

2. *Value of Exports.*—Prior to the 1st July, 1929, the recorded value of all goods exported was taken as representing the value in the principal markets of the Commonwealth in the ordinary commercial acceptance of the term. Owing to the inflated values arbitrarily allotted in recent years to commodities which are subject to governmental control or subsidy, some change in the practice of valuation of exports of such commodities became desirable. Accordingly a new basis was adopted as from 1st July, 1929, for the statistical valuation of exports of sugar, butter and goods on which bounty or rebate was paid which would show for (a) *Sugar*—the value f.o.b. at which sold to overseas buyers, or a f.o.b. value equal to the London market price if shipped on consignment ; (b) *Goods on which bounty or rebate was paid on export*—the value in the principal markets of the Commonwealth in the ordinary commercial acceptance of the term, less the value of any bounty or rebate. Until the 31st March, 1934, the basis adopted for the value of exports of butter was the current market value, less the amount paid as export bonus. From 31st March, 1934, to 30th June, 1937, the basis was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the butter was sold and (b) shipped on consignment—the f.o.b. equivalent of the ruling price overseas.

From 1st July, 1930, to 30th June, 1937, the basis adopted for the value of *wool* exported was (a) sold in Australia for export the actual price paid plus the cost of services incurred in placing the wool on board ship, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

From 1st July, 1932, to 30th June, 1937, the basis adopted for the value of *wheat* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the wheat was sold, and (b) shipped on consignment—the f.o.b. equivalent of the current selling price overseas.

From 1st July, 1934, to 30th June, 1937, the basis adopted for the value of *flour* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the flour was sold, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

Since 1st July, 1937, the following revised definitions of f.o.b. values have been adopted for exports generally :—

- (1) Goods sold to overseas buyers before export—the f.o.b. equivalent of the price at which the goods were sold (e.g., as regards wool, the actual price paid by the overseas buyer plus the cost of all services incurred by him in placing the wool on board ship).
- (2) Goods shipped on consignment—the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were dispatched for sale (as regards wool, the f.o.b. equivalent of current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. equivalent of the price ultimately received).

All values to be shown in terms of Australian currency, and to include cost of containers.

3. **Customs Area.**—The Customs Area, to which all overseas trade statistics issued by this Bureau apply, is the whole area of the Commonwealth of Australia, comprising the States of New South Wales (including Federal Capital Territory), Victoria, Queensland, South Australia, Western Australia and Tasmania, and the Northern Territory. Non-contiguous territories and mandated areas are treated as outside countries, and trade transactions between the Commonwealth and these non-contiguous territories are part of the overseas trade of the Commonwealth. Such transactions are shown separately, i.e., the trade of the Commonwealth with each particular country is separately recorded and tabulated.

4. **Statistical Classification of Imports and Exports.**—The Oversea Trade Bulletin No. 33 for the year 1935-36, from which the summary figures in this Year Book have been extracted, was compiled according to a classification which came into operation on 1st July, 1922. In order to meet the demand for more detailed information relating to imports and exports the number of items has been materially increased. The revised classification at 30th June, 1936, was divided into 21 classes, with 1,820 separate import items and 562 export items.

5. **The Trade Year.**—From 1st July, 1914, the statistics relating to Oversea Trade have been shown according to the fiscal year (July to June). Prior to that date the figures related to the calendar year. A table is given in § 14 showing the total value of imports and exports in the calendar years 1933 to 1936 inclusive.

6. **Records of Past Years.**—In the years preceding federation, each State independently recorded its trade, and in so doing did not distinguish other Australian States from foreign countries. As the aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, it is unfortunate that past records of values and the direction of imports and exports were not on uniform lines. The figures in the following table for years prior to federation have been carefully compiled and may be taken as representative of the overseas trade of Australia as a whole. On the introduction of the Customs Act 1901, the methods of recording values were made uniform throughout the States, but it was not until September, 1903, that a fundamental defect in the system of recording transhipped goods was remedied. Prior to 1905 the value of ships imported or exported was not included in the returns of trade.

7. **Ships' Stores.**—Prior to 1906 goods shipped in Australian ports on board overseas vessels as ships' stores were included in the general exports. From 1906, ships' stores have been specially recorded as such, and omitted from the return of exports. A table showing the value of these stores shipped each year since 1900 is given later in this Chapter.

§ 5. Oversea Trade.

1. **Total Oversea Trade.**—(i) *Including Gold.* The following table shows the total trade (including gold) of the Commonwealth with overseas countries from the earliest date for which records are available. To save space, the period 1826 to 1925-26 has been divided into quinquennia, and the figures shown represent the annual averages for the quinquennia specified. The figures for individual years were published in earlier issues of the Year Book. (See note to following table.)

TOTAL OVERSEA TRADE.—AUSTRALIA.

(INCLUDING GOLD.)

Period (a)	Recorded Value. (c)			Value per Inhabitant.			Percentage of Exports to Imports.
	Imports.	Exports.	Total.	Imports.	Exports.	Total.	
	£1,000.	£1,000.	£1,000.	£ s. d.	£ s. d.	£ s. d.	%
1826 to 30	638	153	791	10 12 5	2 10 11	13 3 4	23.0
1831 „ 35	1,144	613	1,757	11 19 10	6 8 6	18 8 4	53.6
1836 „ 40	2,283	1,112	3,395	14 15 9	7 4 1	21 19 10	48.7
1841 „ 45	1,906	1,378	3,284	9 0 5	6 10 5	15 10 10	72.3
1846 „ 50	2,379	2,264	4,643	6 18 10	6 12 2	13 11 0	95.2
1851 „ 55	11,931	11,414	23,345	19 12 5	18 15 4	38 7 9	95.7
1856 „ 60	18,816	16,019	34,835	18 6 1	15 11 8	33 17 9	85.1
1861 „ 65	20,132	18,699	38,831	15 17 1	14 14 9	30 11 10	93.0
1866 „ 70	18,691	19,417	38,108	12 7 4	12 16 11	25 4 3	103.9
1871 „ 75	21,982	24,247	46,229	12 7 2	13 13 6	26 0 8	110.3
1876 „ 80	24,622	23,772	48,394	11 19 7	11 10 9	23 10 4	96.6
1881 „ 85	34,895	28,055	62,950	14 4 3	11 9 5	25 13 8	80.4
1886 „ 90	34,675	26,579	61,254	11 16 11	9 1 0	20 17 11	70.6
1891 „ 95	27,335	33,683	61,018	8 5 2	10 2 5	18 7 7	123.2
1896 „ 1900	33,763	41,094	74,857	9 5 4	11 5 6	20 10 10	121.7
1901 „ 05	39,258	51,237	90,495	10 1 10	13 2 9	23 4 7	130.5
1906 „ 10	51,508	69,336	120,844	12 4 8	16 9 11	28 14 7	134.6
1911 „ 15-16	73,411	74,504	147,915	15 7 4	15 12 10	31 0 2	101.5
1916-17 to 1920-21	100,735	115,066	215,801	19 7 9	22 2 10	41 10 7	114.2
1921-22 to 1925-26	136,844	134,545	271,389	23 15 0	23 7 7	47 3 1	98.3
1926-27 ..	164,717	144,084	308,801	26 18 1	23 10 9	50 8 10	87.5
1927-28 ..	147,945	141,206	289,151	23 13 8	22 12 0	46 5 8	95.4
1928-29 ..	143,048	141,633	284,681	22 12 3	22 5 11	44 18 2	98.6
1929-30 ..	131,081	125,127	256,208	20 7 7	19 9 0	39 16 7	95.5
1930-31(d)	60,960	104,856	..	9 7 7	16 2 9	..	..
(e)	60,960	89,326	150,286	9 7 7	13 14 11	23 2 6	140.5
1931-32(d)	44,713	108,404	..	6 16 6	16 10 10	..	..
(e)	44,713	85,348	130,061	6 16 6	13 0 5	19 16 11	190.9
1932-33(d)	58,014	120,943	..	8 15 8	18 6 3	..	..
(e)	58,014	96,597	154,611	8 15 8	14 12 0	23 8 2	166.5
1933-34(d)	60,713	123,441	..	9 2 6	18 11 0	..	..
(e)	60,713	98,573	159,286	9 2 6	14 16 2	23 18 8	162.4
1934-35(d)	74,119	112,986	..	11 1 2	16 17 2	..	..
(e)	74,119	90,225	164,344	11 1 2	13 9 3	24 10 5	121.7
1935-36(d)	85,253	130,381	..	12 12 7	20 4 1	..	..
(e)	85,253	108,907	194,160	12 12 7	16 2 8	28 15 3	127.8
1936-37(d)(f)	92,534	160,532	..	13 12 0	23 11 10	..	..
(e)	92,534	128,191	220,725	13 12 0	18 10 9	32 8 9	138.5

(a) The figures given for the years 1826 to 1925-26 represent the annual averages for the quinquennial periods. The trade of the individual years will be found in Official Year Book No. 29 and earlier issues. From 1924-25 onwards the particulars relate to fiscal years. (b) Prior to 1924-25, stores were included in the general exports. For value of these goods shipped each year since 1924-25, see later table, § 9. (c) For actual values for recent years, showing merchandise and bullion and some separately, see § 6, parts 5 and 6. (d) Recorded values. (e) Imports, British currency; Exports, Australian currency. (f) Preliminary figures, subject to revision.

Graphs which are published on pages 483 and 484 of this chapter show the movement of Australian oversea trade and the trade per head of population from 1826 onwards.

In previous issues of the Official Year Book fluctuations in the value of the oversea trade of Australia have been treated in some detail for earlier years. The enhanced prices ruling for commodities and the peculiar conditions affecting Australian trade were responsible for the high value of imports in the years following the war and these factors should be taken into consideration in making comparisons with pre-war years.

In 1924-25 the total value of oversea trade was £318,454,000 represented by imports £157,143,000, and exports £161,311,000. So far as total trade and exports are concerned these figures are the highest recorded, but the figure for imports was exceeded in 1920-21, and again in 1926-27. Imports in 1924-25, however, included an exceptionally large quantity of bullion and specie valued at £10,543,000. In the three years ended 1928-29 imports fell but exports were well maintained and in 1929-30 both imports and exports declined substantially. The full effects of the economic depression and of certain restrictions imposed by the Commonwealth Government are reflected in the greatly diminished trade figures for 1930-31 onwards. The lowest level was recorded in 1931-32 when the total trade amounted to £130,001,000. Most of the Government restrictions were removed in 1932. Following a gradual improvement in the next two years recovery was more rapid in 1935-36 and 1936-37 due mainly to the higher export prices realized for primary products, notably wool and wheat. In 1935-36 the total oversea trade was £194,160,000 an increase of £29,816,000 compared with 1934-35. Imports were higher by £11,134,000 and exports by £18,682,000. Marked increases were recorded in the value of imports of the following commodities in 1935-36:—fish, tobacco, spirits (beverages), apparel and attire, carpets and linoleums, oils (in bulk), electric machinery and appliances, motive power machinery (excluding electric), iron and steel, tools of trade, motor vehicles and parts, timber, crude rubber and rubber waste, books and periodicals, fancy goods, vegetable substances, earthenware, cements, etc., and drugs and chemicals. In quantity and value exports of the following principal commodities were greater than in 1934-35:—chilled beef, frozen lamb and pork, milk dried and concentrated, fresh apples, wheat, wine, cattle hides, sheepskins, coal, iron ore, concentrates, lead pig, zinc bars, leather, undressed timber, silver and gold. Eggs in shell, frozen beef, frozen mutton and rabbits and hares, dried fruits, flour, bran pollard and sharps, sugar, and tin ingots were exported in smaller quantities and values were lower. Shipments of butter and wool were lower but the values were much higher.

(ii) *Excluding Gold.* In recent years there have been large gold movements of an exceptional nature, which have been included in the previous table. The fluctuations in merchandise trade (including silver as merchandise) are shown more clearly in the following table, from which all gold movements have been excluded:—

OVERSEA TRADE—AUSTRALIA.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

British Currency Values.

Year.	Imports excluding Gold.	Exports excluding Gold.	Total Trade excluding Gold.	Value per Inhabitant.			Percentage of Exports on Imports.
				Imports.	Exports.	Total Trade.	
	£1,000 Stg.	£1,000 Stg.	£1,000 Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.	%
1931-32	44,959	75,818	119,877	6 14 5	11 11 5	18 5 10	172.2
1932-33	56,872	78,562	135,434	8 12 3	11 17 11	20 10 2	138.1
1933-34	59,502	90,914	150,416	8 18 10	13 13 3	22 12 1	152.8
1934-35	72,440	82,371	154,811	10 16 2	12 5 10	23 2 0	113.7
1935-36	83,617	98,886	182,503	12 7 9	14 13 0	27 0 9	118.3
1936-37a	90,535	117,212	207,747	13 6 1	17 4 6	30 10 7	129.5

(a) Preliminary figures, subject to revision.

2. **Balance of Trade.**—The table on page 500 shows the percentage of exports on imports (including gold) for quinquennial periods from 1826 to 1925-26 and for each financial year from 1926-27 to 1936-37, while the table on page 501 shows the percentage of exports on imports (excluding gold) for each financial year 1931-32 to 1936-37. Reference to the first mentioned table shows that prior to the quinquennial period 1891-95 the balances of trade, with two exceptions, due to temporary dislocations, had been on the side of imports, while from that period to 1920-21, the position was reversed. During the subsequent quinquennial period ended 1925-26, there was an excess of imports, as was the case in each of the years 1926-27 to 1929-30. From 1930-31 to 1936-37 exports greatly exceeded imports.

In recent years imports and exports of gold for monetary purposes have made the interpretation of the foregoing tables more difficult. In the following table, the balance of commodity trade, including the value of gold currently produced in Australia, has been separated from the monetary movement of gold:—

COMMODITY BALANCE OF TRADE AND MONETARY MOVEMENT OF GOLD.

British Currency Values.

Year.	A. Total Imports other than Gold. (Specie, Bullion and in Matte.)	B. Total Exports, other than Gold. (Specie, Bullion and in Matte.)	C. Gold produced in Australia.	D. Total of Mer- chandise exports and Gold Production. B + C	E. Commodity Balance of Trade. D - A	F. Net Ex- ports of Gold (Specie, Bullion and in Matte) in excess of Production F	G. Total Balance. E + F
	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000
1910 ..	59.0	69.8	11.6	81.4	22.4	- 7.9	14.5
1911 ..	65.4	67.5	10.5	78.0	12.6	- 0.1	12.5
1912 ..	76.8	66.8	9.9	76.7	- 0.1	1.1	1.0
1913 ..	78.4	75.1	9.4	84.5	6.1	- 7.3	- 1.2
1914 (a) ..	39.0	36.5	4.4	40.9	1.9	- 3.7	- 1.8
1914-15 ..	64.0	58.0	8.5	66.5	2.5	- 0.3	- 3.3
1915-16 ..	77.2	64.2	7.7	71.9	- 5.3	2.3	- 3.0
1916-17 ..	76.0	86.3	6.6	92.9	16.9	4.8	21.7
1917-18 ..	60.8	75.0	5.8	80.8	20.0	- 0.9	19.1
1918-19 ..	95.0	106.8	5.4	112.2	17.2	- 5.0	11.6
1919-20 ..	98.9	144.3	5.4	149.7	50.8	0.1	50.9
1920-21 ..	163.8	120.8	4.7	131.5	- 32.3	0.6	- 31.7
1921-22 ..	103.0	124.3	3.8	128.1	25.1	- 0.3	24.8
1922-23 ..	131.7	115.6	3.3	118.9	- 12.8	- 1.1	- 13.9
1923-24 ..	140.6	116.7	3.2	116.9	- 20.7	- 0.4	- 21.1
1924-25 ..	140.7	160.4	2.8	163.2	16.5	- 12.3	- 4.2
1925-26 ..	151.3	141.9	2.3	144.2	- 7.1	1.7	- 5.4
1926-27 ..	164.1	132.7	2.2	134.9	- 29.2	8.6	- 20.6
1927-28 ..	146.9	138.4	2.1	140.5	- 6.4	- 0.3	- 0.7
1928-29 ..	143.3	138.6	1.9	140.5	- 2.8	0.8	- 2.0
1929-30 ..	130.8	98.2	1.9	100.1	- 30.7	24.7	- 6.0
1930-31 ..	60.6	77.1	2.2	79.3	18.7	9.7	28.4
1931-32 ..	44.1	75.8	3.6	79.4	35.3	5.3	40.6
1932-33 ..	56.9	78.6	4.6	83.2	26.3	12.3	38.6
1933-34 ..	59.5	90.9	5.7	96.6	37.1	0.8	37.9
1934-35 ..	72.5	82.4	6.0	88.4	15.9	0.2	16.1
1935-36 ..	83.6	98.0	8.0	106.0	22.3	0.4	22.7
1936-37 (b) ..	90.5	117.2	8.9	126.1	35.6	0.1	35.7

(a) First six months only.

(b) Preliminary figures, subject to revision.

3. **Balance of Payments.**—The balance of visible trade, including the net movement of precious metals, does not present a complete picture of Australia's international transactions during each year. Allowance must also be made for unrecorded imports and exports, for services rendered and received, and for international capital and interest transactions. The values of some of these items are known, and some of those remaining can be estimated with a sufficient measure of accuracy, but for many items it is difficult to make even a rough guess. A continuous investigation is being made into the values of these "invisible" items in the balance of payments.

§ 6. Direction of Oversea Trade.

1. Imports according to Country of Origin.—The following table shows the value (in British currency) of the imports into Australia during the past five years of commodities stated to be the produce or manufacture of the undermentioned countries. The figures however, do not indicate with any degree of precision the competitive forces of different countries in the Australian import trade. To measure the success or otherwise of these forces requires some analysis which will show the relative amounts of different classes of goods supplied by different countries. The results of such an analysis, confined to the major classes of manufactured goods imported, are shown in § 14 of this Chapter.

AUSTRALIAN IMPORTS.—COUNTRIES OF ORIGIN.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

British Currency Values.

Country of Origin.	1931-32.	1932-33.	1933-34.	1934-35	1935-36.
	£ str.	£ str.	£ str.	£ str.	£ str.
United Kingdom	17,408,811	23,541,877	25,143,101	30,788,269	33,838,843
British Possessions—					
Canada	1,392,271	2,315,462	2,918,095	4,091,796	5,375,851
Ceylon	598,177	624,562	718,563	795,307	900,724
India	2,776,356	3,423,103	2,926,181	2,541,377	2,732,145
Malaya (British) ..	276,954	271,407	327,235	561,845	488,254
New Zealand	702,686	731,200	1,198,645	1,294,181	1,552,413
Pacific Islands—					
Nauru	217,512	334,747	288,249	292,431	361,986
Papua	138,972	96,848	93,296	116,716	128,078
Territory of New Guinea ..	68,483	90,950	68,703	87,523	117,419
Other Islands	228,768	328,971	245,825	346,240	435,941
Union of South Africa ..	56,598	99,048	133,441	177,063	284,846
Other British Possessions ..	352,196	456,435	546,692	512,224	720,930
Total, British Possessions	6,807,673	8,773,333	9,464,925	10,816,703	13,158,587
Total, British Countries ..	24,216,484	32,315,210	34,608,026	41,604,972	46,997,430
Foreign Countries—					
Belgium	282,131	391,294	368,219	477,864	568,083
China	314,778	266,938	285,514	364,127	657,178
France	1,145,829	1,195,470	956,335	862,147	790,108
Germany	1,427,079	1,831,936	1,920,676	2,145,315	2,903,049
Italy	453,891	676,139	588,260	557,438	444,141
Japan	2,396,734	3,536,581	3,676,737	4,624,740	4,969,571
Netherlands	361,405	461,674	389,669	504,573	564,236
Netherlands East Indies ..	2,648,948	2,930,951	3,960,233	4,390,327	4,928,025
Norway	188,300	305,455	340,325	382,671	418,252
Pacific Islands	73,942	70,552	39,054	18,146	33,021
Philippine Islands	35,947	34,899	59,733	70,885	92,010
Sweden	693,433	886,332	782,780	828,283	972,096
Switzerland	471,054	478,136	451,030	462,023	602,115
United States of America ..	7,037,417	8,084,047	7,835,982	11,041,365	13,001,705
Other Foreign Countries ..	1,098,211	1,881,833	1,729,716	2,238,227	2,056,012
Total, Foreign Countries..	18,629,099	23,032,237	23,387,263	28,977,431	34,557,243
Total	42,845,583 (a)	55,347,447 (a)	57,995,289 (a)	70,582,403 (a)	81,554,673 (a)

(a) Excluding Outside Packages, 1931-32, £1,213,561; 1932-33, £1,524,882; 1933-34, £1,506,932; 1934-35, £1,857,507; and 1935-36, £2,062,275.

2. Percentage of Imports from Various Countries.—In view of the fluctuations in the total values of imports, it is somewhat difficult to ascertain from the preceding table the relative importance of the various countries in the import trade of Australia in successive years. A better idea of the proportion of imports supplied by each country during each year may be obtained from the following table of percentages:—

AUSTRALIAN IMPORTS.—PERCENTAGES FROM COUNTRIES OF ORIGIN.
(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country of Origin.	1931-32.	1932-33.	1933-34.	1934-35	1935-36.
	per cent.	per cent.	per cent.	per cent.	per cent.
United Kingdom	40.63	42.54	43.35	43.62	41.50
British Possessions—					
Canada	3.25	4.18	5.03	5.80	6.60
Ceylon	1.38	1.13	1.24	1.13	1.18
India	6.48	6.18	5.05	3.60	3.35
Malaya (British)	0.65	0.49	0.56	0.80	0.60
New Zealand	1.64	1.32	2.07	1.83	1.90
Pacific Islands—					
Nauru	0.52	0.61	0.50	0.41	0.44
Papua	0.32	0.17	0.16	0.17	0.16
Territory of New Guinea ..	0.16	0.16	0.12	0.12	0.14
Other Islands	0.53	0.60	0.42	0.49	0.53
Union of South Africa	0.13	0.18	0.23	0.25	0.35
Other British Possessions ..	0.83	0.83	0.94	0.72	0.88
Total, British Possessions	15.80	15.85	16.32	15.32	16.13
Total, British Countries..	56.52	58.39	59.67	58.94	57.63
Foreign Countries—					
Belgium	0.66	0.71	0.63	0.68	0.70
China	0.73	0.48	0.49	0.52	0.81
France	2.67	2.15	1.65	1.22	0.97
Germany	3.33	3.33	3.32	3.04	3.63
Italy	1.06	1.22	1.01	0.79	0.54
Japan	5.59	6.38	6.34	6.55	6.09
Netherlands	0.84	0.83	0.67	0.72	0.69
Netherlands East Indies ..	6.18	5.29	6.83	6.22	6.04
Norway	0.44	0.55	0.59	0.54	0.51
Pacific Islands	0.17	0.12	0.07	0.03	0.04
Philippine Islands	0.08	0.06	0.10	0.11	0.12
Sweden	1.62	1.06	1.35	1.17	1.19
Switzerland	1.10	0.86	0.78	0.66	0.74
United States of America ..	16.43	14.60	13.52	15.64	17.05
Other Foreign Countries ..	2.55	3.07	2.68	3.17	3.25
Total, Foreign Countries ..	43.48	41.61	40.33	41.06	42.37
Total	100	100	100	100	100

The percentage of imports from the United Kingdom during the period covered by the above table showed a gradual upward tendency from 1931-32 to 1934-35, but decreased in 1935-36. The United Kingdom supplied 43.62 per cent. of the imports during 1934-35, compared with 40.63 per cent. in 1931-32, but during 1935-36 the percentage declined to 41.50 per cent. The proportion of imports from British Possessions increased from 15.80 per cent. in 1931-32 to 16.13 per cent. in 1935-36, owing to the fact that the imports of motor chassis and undressed timber from Canada were sustained at a higher level than imports in the aggregate. The proportion of imports supplied by foreign countries declined from 43.48 per cent. in 1931-32 to 41.06 per cent. in 1934-35 but advanced to 42.37 per cent. in 1935-36.

Some marked changes were recorded in the proportion of imports from foreign countries during the five years. Japan increased its trade from 5.59 per cent. in 1931-32 to 6.09 per cent. in 1935-36. A reduction in the imports of tea and oil from the Netherlands East Indies during 1931-32 and 1932-33 was responsible for a decline in that country's percentage during those years, but the trade was regained in 1933-34 only to fall away somewhat in 1934-35 and 1935-36 with further decreases in tea. The share of imports supplied by the United States of America after falling from 16.43 per cent. of the total in 1931-32 to 13.52 per cent. in 1933-34 recovered and amounted to 17.05 per cent. of the total in 1935-36. Increases in the imports of tractors, motor chassis, petrol and manufactured tobacco were mainly responsible. Imports from France consistently declined in proportion during the period under review while imports

from Germany showed a marked upward trend in 1935-36, metals, machinery, apparel and textiles accounting for most of the increase.

Although imports from British countries, with the exception of British Malaya, increased in value in 1935-36 as compared with 1934-35 the aggregate increase of £5,392,000 was less than the increase of £5,580,000 in the imports from foreign countries and the proportion of the total received from British sources declined from 58.94 per cent. to 57.63 per cent. Increases were general among foreign countries with the exception of France and Italy. The increase of £2,800,000 in the value of imports from the United States of America in 1935-36 was exceeded only by the United Kingdom with an increase of £3,051,000. Other large increases in value were Canada £1,284,000, Germany £818,000, Netherlands East Indies £538,000 and Japan £345,000, but the rate of increase for the United Kingdom, the Netherlands East Indies and Japan failed to keep pace with the rate of increase for all countries.

3. *Direction of Exports.*—The following table shows the value in Australian currency of commodity exports to the principal countries during the five years 1931-32 to 1935-36 inclusive :—

EXPORTS FROM AUSTRALIA TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Australian Currency Values.

Country.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£ A.	£ A.	£ A.	£ A.	£ A.
United Kingdom	48,228,712	46,893,462	54,402,862	53,760,437	61,087,309
British Possessions—					
Canada	1,033,782	1,209,237	1,267,170	1,444,063	1,322,178
Ceylon	313,243	331,001	421,499	648,187	970,061
Fiji	268,704	347,168	320,707	361,132	483,098
Hong Kong	738,707	709,242	506,696	715,994	624,663
India	748,835	831,470	610,159	785,815	973,171
Malaya (British)	919,827	962,060	1,015,315	1,315,822	1,263,526
Mauritius	102,757	90,421	107,000	98,790	90,000
New Zealand	2,603,716	2,770,190	3,031,026	3,617,339	4,396,840
Papua	128,351	128,145	129,500	151,865	165,613
Union of South Africa	370,211	232,339	247,278	316,381	449,050
Other British Possessions	1,667,990	1,727,848	1,724,547	1,592,071	2,562,225
Total, British Possessions	8,896,213	9,399,121	9,380,897	11,047,459	13,308,231
Total, British Countries	57,124,925	56,292,583	63,783,759	64,807,896	74,395,540
Foreign Countries—					
Belgium	3,579,143	4,061,551	7,470,984	6,080,381	7,260,067
Chile and Peru	208,238	264,568	42,023	2,029	2,931
China	4,945,813	6,283,398	914,606	2,472,202	1,212,821
Manchuria including Kwantung Peninsula	(a)	(a)	(a)	1,613,775	830,815
Egypt	1,052,557	481,256	370,234	639,054	524,060
France	4,636,602	6,054,054	6,517,380	4,731,952	6,131,143
Germany	3,922,479	5,080,724	9,439,054	1,738,481	2,368,153
Italy	3,631,015	3,275,500	4,600,423	995,827	680,225
Japan	11,659,012	11,468,459	13,906,256	12,095,514	17,661,232
Netherlands	500,712	306,193	455,328	927,723	1,200,938
Netherlands East Indies	1,352,898	1,195,518	1,149,167	1,182,329	1,271,105
Norway	54,240	35,085	2,937	7,439	11,052
Pacific Islands	244,262	284,483	285,637	346,377	374,878
Philippine Islands	317,615	430,154	348,177	324,053	553,111
Soviet Union (Russia)	190,143	267,279	88,678	84,180	10,700
Spain	360,119	100,424	157,521	559,092	181,052
Sweden	252,488	120,982	250,868	240,751	264,018
United States of America	1,990,262	1,341,241	2,491,601	2,754,228	5,615,372
Other Foreign Countries	479,223	986,013	1,593,274	1,561,676	3,280,145
Total, Foreign Countries	39,386,721	42,106,482	50,084,378	38,361,543	49,157,811
Total	96,511,646	98,399,065	113,868,137	103,169,439	123,553,351

(a) Included with China.

The comparison of the value of exports as shown in the above table is affected by two factors operating in opposite directions. The values have been depressed by prices, but have been increased by the fact that they are stated in Australian currency. In 1930-31 the recorded value of exports was increased by 17.4 per cent. by the depreciation

of the currency and in subsequent years the increase from this cause amounted to 25½ per cent. Stated in sterling the value of exports of merchandise for 1935-36 was £98,063,851 against £122,824,975 in Australian currency. Up to the end of the year 1929-30 the two currencies had practically the same value.

4. **Percentage of Exports to Various Countries.**—In consequence of the fluctuations in the total values of exports, the relative importance of various countries as markets for Australian produce is shown more clearly by the following table of percentages.

EXPORTS FROM AUSTRALIA.—PERCENTAGES TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	per cent.	per cent.	per cent.	per cent.	per cent.
United Kingdom	49.97	47.66	47.78	52.11	49.32
British Possessions—					
Canada	1.07	1.23	1.13	1.40	1.07
Ceylon	0.32	0.34	0.37	0.63	0.78
Fiji	0.28	0.35	0.28	0.35	0.39
Hong Kong	0.77	0.78	0.44	0.69	0.51
India	0.78	0.84	0.53	0.76	0.79
Malaya (British)	0.95	0.98	0.80	1.27	1.02
Mauritius	0.11	0.09	0.09	0.10	0.07
New Zealand	2.70	2.82	2.66	3.51	3.55
Papua	0.13	0.13	0.11	0.15	0.14
Union of South Africa	0.38	0.23	0.22	0.31	0.36
Other British Possessions	1.73	1.76	1.52	1.54	2.07
Total, British Possessions	6.22	9.55	8.24	10.71	10.75
Total, British Countries	59.19	57.21	56.02	62.82	60.07
Foreign Countries—					
Belgium	3.71	4.13	6.56	5.89	5.86
Chile and Peru	0.22	0.27	0.04	0.00	0.00
China	5.12	6.39	0.80	2.40	0.98
Manchuria, including Kwantung Peninsula	(a)	(a)	(a)	1.56	0.68
Egypt	1.09	0.49	0.33	0.62	0.42
France	4.80	6.15	5.72	4.59	4.95
Germany	4.07	5.17	8.29	1.69	1.91
Italy	3.76	3.33	4.04	0.97	0.56
Japan	12.08	11.66	12.21	11.72	14.26
Netherlands	0.53	0.31	0.40	0.90	0.97
Netherlands East Indies	1.40	1.21	1.01	1.15	1.03
Norway	0.06	0.04	0.00	0.01	0.01
Pacific Islands	0.25	0.29	0.25	0.33	0.30
Philippine Islands	0.33	0.44	0.31	0.31	0.45
Soviet Union (Russia)	0.20	0.27	0.08	0.08	0.01
Spain	0.37	0.16	0.14	0.54	0.15
Sweden	0.26	0.12	0.22	0.23	0.21
United States of America	2.06	1.36	2.18	2.07	4.53
Other Foreign Countries	0.50	1.00	1.40	1.52	2.65
Total, Foreign Countries	40.81	42.79	43.98	37.18	39.93
Total	100	100	100	100	100

(a) Included with China.

5. **Balance of Trade with Principal Countries.**—In the following table a comparison is made in British currency values of the total Australian trade in merchandise (excluding bullion and specie) with principal countries during the years 1934-35 and 1935-36:—

The balance of Australian trade (including gold) with a few of the principal countries is the subject of a graph which is published on page 485 of this chapter

BALANCE OF AUSTRALIAN TRADE WITH PRINCIPAL COUNTRIES.

(EXCLUDING BULLION AND SPECIE.)

British Currency Values.

Country.	Imports from— (a)		Exports to—		Excess of Exports.	
	1934-35.	1935-36.	1934-35.	1935-36.	1934-35.	1935-36.
	£Stg.1,000.	£Stg.1,000.	£Stg.1,000.	£Stg.1,000.	£Stg.1,000.	£Stg.1,000.
United Kingdom	30,787	33,536	42,803	48,572	12,016	14,736
Canada	4,092	5,370	1,153	1,056	2,939	4,320
India	2,541	2,732	490	745	2,051	1,937
New Zealand	1,297	1,549	2,887	3,506	1,596	1,957
Other British Countries ..	2,875	3,470	3,902	4,706	1,027	1,290
Total, British Countries ..	41,586	46,903	51,235	58,585	9,649	11,682
Belgium	478	568	4,855	5,797	4,377	5,229
China	304	657	1,974	968	1,610	311
France	862	790	3,778	4,805	2,916	4,105
Germany	2,115	2,663	1,388	1,891	757	1,072
Italy	557	444	795	550	238	106
Japan	4,625	4,970	9,657	14,101	5,032	9,131
Netherlands East Indies ..	4,390	4,628	944	1,017	3,446	3,911
United States of America ..	11,042	13,002	2,199	4,480	8,843	9,422
Other Foreign Countries ..	4,515	5,334	5,035	5,780	520	446
Total, Foreign Countries ..	28,978	34,556	30,625	39,479	1,647	4,923

(a) Excluding outside packages.

The balance of trade with single countries is of little significance, since in the first place, there is still a fair proportion of Australian produce distributed through the United Kingdom either immediately, by transshipment or re-sale, or ultimately, by incorporation in manufactures. Further, in very many cases international balances are equated directly by services or indirectly by exchange of goods between several countries.

6. Principal Imports and Exports.—Countries.—The total value of imports from and exports to each of the more important British and foreign countries during 1935-36, together with brief particulars of the principal commodities interchanged with such countries, is given hereunder. The values of imports are shown in British currency, while the exports are shown in Australian currency. Should further details be required, reference may be made to the annual publication, *Overseas Trade Bulletin*, No. 33, issued by this Bureau, which gives details of the trade with Australia of 37 of the principal countries of the world during the past five years. That publication furnishes information regarding the country of origin of each statistical item of import for the years 1934-35 and 1935-36, showing the value and (where available) the quantity imported from each country, and the value of each item imported into each of the States. The publication referred to also gives the country to which each item of exports was shipped during these years.

United Kingdom. *Total Imports of United Kingdom Origin*, £33,830,085. The two outstanding classes of goods imported were—Machines, machinery and manufactures of metal, £13,550,189; and apparel, textiles, yarns, etc., £9,170,808. Imports of the following goods also contributed largely to the total:—Paper and stationery, £3,052,272; drugs and chemicals, £1,902,253; earthenware, crockery, glass, etc., £870,101; spirituous liquors, £602,030; optical, surgical and scientific instruments, £375,234; paints and varnishes, £317,138; foodstuffs of animal origin, £247,097; jewellery and fancy goods, £232,717; rubber and leather manufactures, £218,850; stones and minerals, £181,000; and foodstuffs of vegetable origin, £159,092.

Total Exports to United Kingdom, £69,055,347. Of this total £68,137,397 represented Australian produce. The principal items of export were—Wool, £18,379,416; butter, £9,042,812; wheat, £8,659,625; gold, £7,068,038; frozen mutton and lamb, £4,371,319; lead, pig, £3,734,035; sugar, £2,131,894; beef, frozen and chilled, £2,117,429; fruits, fresh, £1,535,318; fruits, dried, £1,189,043; hides and skins, £1,080,396; frozen meats, other, £1,064,746; flour, £933,172; eggs, £912,505; wine, £863,752; and fruits in liquid, £677,765.

Canada. Total Imports of Canadian Origin, £5,375,851. The principal imports were motor chassis and parts, £1,735,697; paper, £912,126; timber, £700,705; fish, preserved in tins, £411,745; apparel and textiles, £270,828; vehicles (excluding motors) and parts, £140,571; tools of trade, £116,999; sensitized films, £107,795; drugs and chemicals, £99,279; machines and machinery, £87,705; hides and skins, £52,709; and typewriters and parts, £43,725.

Total Exports to Canada, £1,322,178. Of this total £1,316,046 was Australian produce. The principal items were—Fruits, dried, £496,160; wool, £490,007; fruits preserved, £68,808; tallow, £34,766; sugar, £31,454; hides and skins, £33,452; gelatine and glue, £32,547; flour, £31,454; and spirituous liquors, £20,952.

Ceylon. Total Imports of Ceylon Origin, £960,724. The principal items were—Tea, £797,368; rubber, £128,794; and fibres, £11,682.

Total Exports to Ceylon, £970,961. Of this total £964,412 was Australian produce. The principal items were—Silver, £602,365; flour, £120,000; meats, £41,187; milk and cream, £44,779; fruits, £34,358; wheat, £32,740; and butter, £29,430.

Fiji. Total Imports of Fijian Origin, £155,301; include gold, £78,576; copra, £49,829; molasses, £17,617; hides, £2,918; and bananas, £1,202.

Total Exports to Fiji, £483,008. Of this total £414,008 was Australian produce. The principal items were—Machinery and metal manufactures, £121,701; bran and pollard, £40,288; tobacco, £33,382; flour, £31,310; drugs and chemicals, £11,041; coal, £18,900; spirituous liquors, £17,337; apparel and textiles, £12,270; timber, £10,803; tea, £10,433; oils, in bulk, £10,263; meats, £8,830; and vegetables, £8,137.

Hong Kong. Total Imports of Hong Kong Origin, £20,000. The principal items were—Ginger, £7,341; lumps and lumpware, £3,318; fireworks, £3,002; bamboo and cane, £3,757; and tung oil, £1,806.

Total Exports to Hong Kong, £624,663. Of this total £598,784 was Australian produce. The principal exports were—Flour, £33,300; butter, £1,237; leather, £44,051; meats, £41,004; sandalwood, £33,842; precious stones, £20,428; milk and cream, £18,140; béche-de-mer, £17,308; fresh fruits, £14,704; oatmeal, wheatmeal, etc., £8,280; wool, £7,215; lead, pig, £6,755; and jams and jellies, £6,523.

India. Total Imports of Indian Origin, £2,732,145. The principal imports were—Bags and sacks, £1,073,230; hessians, £300,287; hides and skins, £155,450; tea, £108,501; linseed, £61,705; cotton, raw, £47,035; jute, £35,808; gums and resins, £32,314; mats and matting, £29,831; and yarns, £12,137.

Total Exports to India, £6,311,100. Of this total £6,110,120 was Australian produce. The principal exports were—Zinc bars, blocks, £28,385; wool, £135,740; tallow, £125,155; horses, £80,804; wheat, £80,330; silver, £10,501; machines and machinery, £12,000; milk and cream, £10,431; jams and jellies, £1,328; and butter, £10,810.

Malaya (British). Total Imports of Malayan (British) Origin, £480,484. The principal items were—Rubber (crude), £375,447; sago and tapioca, £37,003; spices (unground), £26,510; latex, £26,187; and gums and resins, £5,444.

Total Exports to Malaya (British), £1,263,526. Of this total £1,224,079 was Australian produce. The principal items were—Flour, £410,784; milk and cream, £319,474; meats, £97,607; butter, £90,041; spirituous liquors, £59,400; metals and machinery, £52,328; fruits, £45,509; sheep, £22,800; leather, £14,198; lard and refined animal fats, £13,162; and coal, £12,009.

New Zealand. Total Imports of New Zealand Origin, £1,773,250. The principal imports were—Timber, £362,974; wool, £328,956; hides and skins, £242,812; gold, £220,837; fish, £168,036; seeds, £86,147; horses, £66,988; flax and hemp, £58,783; sausage casings, £22,150; and beans and peas, £15,463.

Total Exports to New Zealand, £4,396,840, of which £3,938,762 was Australian produce. The principal items were—Machinery and metal manufactures, £1,174,206; apparel and textiles, £400,892; drugs and chemicals, £288,287; timber, £278,680; fruits, dried, £260,993; grain and pulse, £238,879; paper and stationery, £220,069; optical, surgical and scientific instruments, £157,211; earthenware, china, glass, etc., £151,583; fruits, fresh, £139,856; rubber and leather, £132,067; coal, £105,855; paints and varnishes, £102,123; tobacco, £75,000; spirituous liquors, £56,202; and arms, ammunition and explosives, £41,525.

Papua. Total Imports of Papuan Origin, £177,599. The principal items were—Rubber, £66,654; gold, bar, dust, etc., £49,521; coconuts (prepared), £37,816; copra, £14,131; and coffee, raw, £4,499.

Total Exports to Papua, £165,613, of which £112,317 was Australian produce. The principal exports were—Tobacco and manufactures, £26,435; manufactures of metal, £17,083; machines and machinery, £13,222; meats, £12,135; grain and pulse, £9,937; spirituous liquors, £6,176; apparel and textiles, £5,952; and films, £5,084.

Territory of New Guinea. Total Imports of Territory of New Guinea Origin, £1,401,174. The principal items were—Gold, bar, dust, etc., £1,283,755; coconuts (prepared), £48,548; copra, £41,000; and cocoa beans and shells, raw, £2,568.

Total Exports to Territory of New Guinea, £810,113, of which £587,002 was Australian produce. The principal exports were—Silver specie, £104,280; manufactures of metal, £103,743; machines and machinery, £60,181; cinematographs and films, £60,400; meats, £66,184; foodstuffs, vegetable origin, £51,267; tobacco, £48,745; spirituous liquors, £39,466; oils, in bulk, £33,505; apparel and textiles, £22,328; drugs and chemicals, £14,059; and paper and stationery, £13,359.

Union of South Africa. Total Imports of Union of South Africa Origin, £284,846. The principal items were—Diamonds, £129,074; asbestos, crude, £63,035; fish, £31,594; maize, £9,589; feathers, £8,016; and tobacco, £5,008.

Total Exports to Union of South Africa, £449,056, of which £425,531 was Australian produce. The principal exports were—Timber, £139,511; wheat, £94,590; machinery and metal manufactures, £54,823; apparel and textiles, £41,554; gelatine and glue, £17,613; leather, £13,253; tallow, £11,710; fruits, £9,739; meats, £8,400; soap, £7,558; drugs and chemicals, £6,456.

Belgium. Total Imports of Belgian Origin, £568,083. The principal items were—Glass and glassware, £107,029; piecegoods, velvet, £85,664; other piecegoods, £75,817; machinery and metal manufactures, £65,636; gloves, £53,663; precious stones, £42,002; carpets and carpeting, £37,883; paper and stationery, £23,514; drugs and chemicals, £13,280; and arms, ammunition, etc., £11,317.

Total Exports to Belgium, £7,200,067. Of this total £7,247,389 was Australian produce. The principal exports were—Wool, £6,184,099; wheat, £457,468; silver and silver lead concentrates, £204,204; hides and skins, £198,431; barley, £54,059; zinc concentrates, £38,787; copper, £35,820; fruits, fresh, £18,081; silver and silver lead ores, £16,734; timber, £11,184; fodders, £11,200; meats, £5,578; and butter, £4,280.

China. *Total Imports of Chinese Origin, £657,178.* The principal items were—Linseed, £223,588; apparel and textiles, £112,231; tung, etc., oil, £57,674; bristles, etc., £50,875; nuts (edible), £35,798; tea, £31,975; ginger, £20,475; cotton, raw, £18,359; rice, £9,734; drugs and chemicals, £7,623; feathers, £7,591; and fireworks, £6,341.

Total Exports to China, £1,212,821, of which £1,195,069 was Australian produce. The principal items were—Wheat, £868,864; milk and cream, £118,652; butter, £54,996; railway sleepers, £49,631; sandalwood, £27,513; silver, bar, ingot, etc., £16,000; leather, £9,865; timber, £9,401; flour, £7,399; fruits, £5,718; meats, £4,110; and tallow, £4,060.

Czechoslovakia. *Total Imports of Czechoslovakian Origin, £394,521.* The principal items were—Apparel, £131,006; glass and glassware, £72,372; manufactures of metal, £43,719; textiles, £27,503; jewellery, £27,170; paper and stationery, £16,367; and fancy goods, £12,869.

Total Exports to Czechoslovakia, £614,419, of which £614,235 was Australian produce. The principal export was wool, £611,554.

Egypt. *Total Imports of Egyptian Origin, £9,288.* The principal items were—Cigarette tubes and papers, £5,035; and vegetable substances and fibres, £1,968.

Total Exports to Egypt, £524,066, of which £523,393 was Australian produce. The principal exports were—Flour, £158,577; frozen beef, £132,492; other meats, £26,286; timber, £86,379; butter, £75,627; and fresh fruits, £16,521.

France. *Total Imports of French Origin, £790,108.* The principal items were—Argol, £118,878; piecegoods, velvet, £65,323; paper and stationery, £52,786; apparel, £50,158; spirituous liquors, £49,706; trimmings and ornaments, £49,398; olive oil, £46,058; piece goods, silk, £41,742; machinery and metal manufactures, £30,267; lace for attire, £27,485; fertilizers, £22,420; jewellery and fancy goods, £19,545; perfumery and toilet preparations, £19,350; gums and resins, £18,088; foodstuffs of vegetable origin, £15,502; medicines, £15,409; and perfumed spirits, £8,697.

Total Exports to France, £643,036. Of this total, £6,251,255 was Australian produce. The principal exports were—Wool, £4,413,102; sheepskins, £1,634,974; gold, £301,893; stones and minerals, £21,883; horns, £10,328; wheat, £7,880; and precious stones, £4,692.

Germany. *Total Imports of German Origin, £2,963,049.* The principal items were—Machinery, £603,820; manufactures of metal, £430,101; drugs and chemicals, £152,333; paper and stationery, £208,138; earthenware, china, glassware, etc., £150,003; gloves, £147,854; optical and scientific instruments, £145,004; piece goods, £134,540; apparel, £100,712; textiles excluding piecegoods, £81,435; timepieces, £76,314; oils, fats and waxes, £67,573; bags, baskets, etc., £33,005; jewellery and fancy goods, £31,078; musical instruments, £44,611; and paints and varnishes, £37,500.

Total Exports to Germany, £2,368,453, of which £2,353,708 was Australian produce. The principal exports were—Wool, £1,052,436; hides and skins, £108,700; fresh apples, £90,532; stones and minerals, £31,338; drugs and chemicals, £10,328; sausage casings, £13,111; metals, scrap, £9,892; and gums and resins, £4,108.

Italy. *Total Imports of Italian Origin, £444,141.* The principal imports were—Sulphur, £95,367; yarns, artificial silk, £60,083; apparel, £53,005; piecegoods, silk, £52,243; fibres, £31,000; machinery and metal manufactures, £10,702; essential oils, £10,317; olive oil, £15,931; stones and minerals, £13,057; foodstuffs of vegetable origin, £6,580; argol, £6,149; and paper and stationery, £6,051.

Total Exports to Italy, £680,225, of which £682,500 was Australian produce. The principal exports were—Wheat, £320,990; wool, £173,549; hides and skins, £50,528; and tallow, £20,355.

Japan. *Total Imports of Japanese Origin*, £4,969,571. The principal imports were—Silk or containing silk piecegoods, £1,666,357; cotton and linen piecegoods, £913,124; silk, raw, £326,991; machinery and metal manufactures, £237,560; other piecegoods, £200,599; jewellery and fancy goods, £195,592; apparel, £161,571; crockery and household ware, £161,131; sulphur, £132,404; yarns, £131,874; paper and stationery, £78,785; fish, £53,217; bags, baskets, etc., £44,038; and foodstuffs of vegetable origin, £39,165.

Total Exports to Japan, £17,661,232. Of this total, £17,610,544 was Australian produce. The principal exports were—Wool, £14,594,075; wheat, £1,923,596; zinc, bars, blocks, etc., £241,727; iron ore, £158,064; hides and skins, £138,826; iron and steel scrap, £115,665; tallow, £81,202; flour, £75,405; foodstuffs of animal origin, £75,326; trochus shell, £52,791; casein, £34,536; and lead, pig, £31,859.

Netherlands. *Total Imports of Netherlands Origin*, £564,236. The principal items were—Electrical machinery and appliances, £148,755; artificial silk yarns, £143,443; precious stones, £33,270; drugs and chemicals, £28,744; lamps and lampware, £28,279; sausage casings, £20,165; paper, £19,691; caramel, caramel paste and cocoa butter, £18,779; and gin, £16,422.

Total Exports to Netherlands, £1,200,638, of which £1,162,769 was Australian produce. The principal items were—Wool, £1,058,833; hides and skins, £28,852; fruits, fresh, £22,333; flour, £20,108; precious stones, £16,860; machinery and metal manufactures, £13,760; and wheat, £8,867.

Netherlands East Indies. *Total Imports of Netherlands East Indies Origin*, £4,928,025. The principal imports were—Petroleum spirit, £2,158,715; tea, £1,116,374; residual oil, £435,913; petroleum (crude), £329,640; kerosene, £302,374; kapok, £171,948; crude rubber, £123,554; flax and hemp, £88,199; tobacco, £37,771; coffee and chicory, £31,372; and waxes, £29,469.

Total Exports to Netherlands East Indies, £1,281,226. Of this total, £1,263,721 was Australian produce. The principal exports were—Flour, £615,743; butter, £356,279; meats, £47,272; biscuits, £27,276; fruits, fresh, £25,798; coal, £24,299; leather, £23,716; tallow, £19,941; machines and metal manufactures, £18,659; and medicines, £18,467.

Norway. *Total Imports of Norwegian Origin*, £415,252. The principal items were—Fish, preserved in tins, £141,017; paper—writing and typewriting, £95,259; timber, dressed, £42,876; paper, printing, £38,234; manufactures of metal, £27,841; other paper, £11,161; wrapping paper, £10,375; oils in bulk, £9,151; and wood pulp, £7,145.

Total Exports to Norway, £10,052. The principal exports were—Wool, £6,819; and hides and skins, £2,215.

Pacific Islands (British and Foreign). *Total Imports of Pacific Islands Origin*, £2,498,509. The principal imports were—Cocoa, £1,412,149; rock phosphates, £787,004; copra, £204,071; coconuts, prepared, £9,764; crude rubber, £60,084; shells, £28,068; molasses, £17,017; wood and wicker, £13,262; silver, £11,100; hides and skins, £9,068; vanilla beans, £9,068; and coffee, raw, £6,589.

Total Exports to Pacific Islands, £2,180,727. Of this total £1,677,875 was Australian produce. The principal exports were—Manufactures of metal, £241,953; machinery, £189,750; tobacco and preparations, £107,001; silver, £107,386; flour, £104,254; meats, £118,000; coal, £88,003; spirituous liquors, £83,000; cinematographs and films, £83,348; oils, fats and waxes, £78,760; apparel and textiles, £73,704; brim, pollard and sharps, £53,070; drugs and chemicals, £51,712; biscuits, £46,008; timber, £42,517; vegetables, £28,827; tea, £28,514; butter, £28,212; paper and stationery, £23,048; milk and cream, £25,018; earthenware, china, cements, £21,731; rubber and leather, £25,230; arms, ammunition and explosives, £21,001; coke, £16,074; and paints and varnishes, £19,238.

Philippine Islands. *Total Imports of Philippine Islands Origin*, £92,619. The principal items were—Hemp, £56,375; timber, £29,651; and hoods for hats, £4,889.

Total Exports to Philippine Islands, £553,311. Of this total £55,145 was Australian produce. The principal exports were—Flour, £308,325; milk and cream, £85,815; butter, £53,849; meats, £47,669; coal, £35,992; and leather, £5,198.

Soviet Union (Russia). *Total Imports of Soviet Union (Russia) Origin*, £94,663. The principal items were—Furs, dressed, £33,999; hides and skins, £12,371; fish, £8,051; and hair and bristles, £5,434.

Total Exports to Soviet Union (Russia), £10,700. The principal items were—Wool, £8,447; and hides, £2,192.

Spain. *Total Imports of Spanish Origin*, £199,536. The principal items were—Corks, etc., £72,804; nuts, edible, £51,319; olive oil, £15,497; drugs and chemicals, £9,737; quicksilver, £8,395; liquorice, £6,932; wine, £5,379; and dry colours, £4,689.

Total Exports to Spain, £182,952. The principal items were—Wool, greasy, £118,364; hides and skins, £57,998; and oilcake, £5,146.

Sweden. *Total Imports of Swedish Origin*, £972,096. The principal imports were—Machines and machinery, £202,421; pulp for papermaking, £177,760; paper, other, £103,164; vacuum cleaners, £103,067; manufactures of metal, £84,692; paper, wrapping, £73,601; timber and manufactures of wood, £57,644; boards, £55,203; and printing paper, £50,828.

Total Exports to Sweden, £264,918. The principal exports were—Wool, £182,091; apples, fresh, £39,147; and hides, cattle, £27,427.

Switzerland. *Total Imports of Swiss Origin*, £602,145. The principal imports were—Clocks and watches, £200,264; machinery and metal manufactures, £142,663; grass straw for hats, £57,663; apparel and attire, £46,332; piecegoods, silk, £33,420; drugs and chemicals, £32,992; handkerchiefs, £17,056; dyes, synthetic, £13,359; and piecegoods, cotton and linen, £8,101.

Total Exports to Switzerland, £160,978. The principal exports were—Wool, £155,642; and timepieces and fancy goods, £2,970.

United States of America. *Total Imports of United States Origin*, £13,901,857. The principal imports were—Motor classis and parts, £2,842,273; tobacco, unmanufactured, £1,487,200; petroleum spirit, £1,057,183; motive power machinery, £803,888; lubricating (mineral) oil, £670,010; electrical machinery and appliances, £532,438; drugs and chemicals, £487,081; wood and wicker, £485,112; paper and stationery, £292,205; films, £200,033; apparel and textiles, £187,803; iron and steel—plate and sheet, plain, £205,351; optical, etc., instruments, £211,820; sulphur, £234,300; printing machinery, £218,202; sausage casings, £168,717; tools of trade, £108,205; metal working machinery, £144,700; paints and varnishes, £112,204; mining machinery, £106,626; kerosene, £100,803; and hides and skins, £90,863.

Total Exports to the United States of America, £9,866,277. Of this total £8,763,303 was Australian produce. The principal exports were—Gold, £4,284,093; wool, £2,087,305; rabbit and hare skins, £1,552,003; other hides and skins, £600,833; concentrates, £421,025; pearlshell, £197,449; sausage casings, £103,471; tallow, £158,242; ores, £83,339; and wood and wicker, £67,347.

§ 7. Trade with Eastern Countries.

1. **Principal Articles Exported.**—The following table shows the value of exports of Australian and other produce from Australia to Eastern countries during the last five years. The countries concerned in this trade are Borneo (British), Ceylon, China, French Indo China, Hong Kong, India, Japan, Korea, Kwantung Peninsula, Malaya (British), Manchuria, Netherlands East Indies, Philippine Islands, Siam, Time

(Portuguese), and French and Portuguese Possessions in India. During the years 1931-32 and 1932-33 the export trade with Eastern countries showed an improvement in value over the year 1930-31 owing to increased shipments of wheat and flour to China and of wheat and wool to Japan. Wheat exports to Eastern countries were consistently large during the years 1930-31 to 1932-33, but in 1933-34 they fell to relatively very small dimensions, with the result that the value of total exports of merchandise during 1933-34 was nearly £3½ million less than during the previous year, and would have been smaller still but for an increase of over 54 per cent. in the exports of wool to Japan. This marked decline was due to the falling off in shipments of butter to Netherlands East Indies, wheat and tallow to India and Japan, and wheat and flour to China. In 1934-35 exports increased by £2,287,222 due principally to larger exports of wheat to China and Japan and flour to Manchuria, Hong Kong and the Philippine Islands. The value of wool exported to Japan decreased by £3,464,418 although the quantity was 15 per cent. greater. Exports advanced to £25,532,518 in 1935-36, an increase of £4½ million on the previous year and the highest total recorded since 1928-29. The increase in the value of wool shipments to Japan was approximately £6 million but reduced shipments of wheat to China and Japan and of flour to Manchuria were valued at £2 million less compared with 1934-35.

TOTAL EXPORTS FROM AUSTRALIA TO EASTERN COUNTRIES.

Article.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£ A.	£ A.	£ A.	£ A.	£ A.
Biscuits	32,587	33,638	37,815	39,767	35,082
Butter	709,001	530,878	486,878	544,215	657,204
Cheese	13,205	17,785	18,526	22,012	25,538
Coal	146,086	94,963	83,674	74,978	81,907
Fruits—					
Fresh	90,727	96,321	110,555	122,626	124,550
Dried and Preserved	53,929	47,333	51,381	42,081	40,073
Grain and pulse—					
Wheat	7,929,220	7,930,706	1,307,770	4,395,925	2,019,229
Flour	1,534,452	2,449,816	1,744,820	3,304,000	2,790,050
Other (prepared and unprepared)	18,839	30,683	75,014	60,306	71,708
Hay, chaff, and compressed fodder	13,618	13,028	12,285	10,014	16,157
Horses	93,089	84,205	63,357	102,586	105,095
Infants' and Invalids' Food	74,966	89,603	106,033	216,571	211,287
Iron Ore	8,347	7,908	4,072	140,535	158,071
Iron and Steel (scrap)	35,579	43,227	79,945	137,934	115,605
Jams and Jellies	33,646	34,406	39,265	42,328	42,688
Lard and Refined Animal Fats	21,670	22,495	21,764	28,432	35,016
Lead, Pig	51,745	34,031	33,585	51,084	38,011
Leather	182,788	142,686	149,733	141,907	107,941
Meats—					
Bacon and Ham	76,192	82,301	79,293	84,420	91,123
Other meats	260,721	242,769	202,714	214,182	244,139
Milk and Cream	569,011	730,650	667,220	456,108	455,420
Pearlshell and trochus shell	32,544	49,205	41,599	46,737	53,066
Sandalwood	62,014	132,657	114,301	108,600	106,815
Skins, furs, horns, bone, and ivory	—	—	—	—	—
Tallow (unrefined)	391,890	322,616	253,232	200,937	237,181
Timber (undressed)	95,210	47,046	96,973	180,084	85,101
Wool	7,599,943	8,034,927	12,249,581	8,785,163	11,767,210
Zinc—					
Bars, blocks, ingots, etc.	180,193	253,937	246,068	303,282	528,032
Concentrates	24,994	125,211	18,097	—	—
Other merchandise	382,727	497,917	420,720	695,050	614,038
Total merchandise	20,756,275	22,395,763	18,876,572	20,790,602	24,882,501
Specie, and gold and silver bullion	600,501	50,262	102,672	475,864	619,957
Total Exports	21,356,776	22,356,025	18,979,244	21,266,466	25,502,458

(a) Australian currency value. Estimated British currency value—1931-32, £ stg. 16,811,553; 1932-33, £ stg. 17,810,122; 1933-34, £ stg. 15,153,089; 1934-35, £ stg. 10,079,978; 1935-36, £ stg. 10,079,978.

2. *Destination of Exports of Merchandise.*—The next table shows the destination of merchandise exported to Eastern countries during the five years ended 1935-36 :—

EXPORTS OF MERCHANDISE FROM AUSTRALIA TO EASTERN COUNTRIES.

Country of Destination.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£ A.	£ A.	£ A.	£ A.	£ A.
China	4,902,974	6,279,584	914,806	2,472,262	1,212,821
Hong Kong	738,797	767,710	506,596	715,994	624,603
India and Ceylon	778,603	1,114,209	928,986	961,832	1,301,206
Japan	11,659,012	11,468,459	13,906,256	12,095,514	17,061,232
Malaya (British)	919,827	958,830	1,015,315	1,315,822	1,263,526
Manchuria including Kwantung					
Peninsula	(a)	(a)	(a)	1,613,775	839,815
Netherlands East Indies	1,352,898	1,178,078	1,149,167	1,182,329	1,274,195
Philippine Islands	317,615	428,461	348,177	324,053	553,311
Siam	58,460	78,132	71,356	58,060	100,959
Other Eastern Countries	28,089	32,250	35,913	50,361	50,833
Total	b20,756,275	b22,305,763	b18,876,572	b20,790,602	b21,883,561

(a) Included with China. (b) Australian currency value. Estimated British currency value.
 1931-32, £ stg. 16,305,035; 1932-33, £ stg. 17,808,755; 1933-34, £ stg. 15,071,115; 1934-35, £ stg. 16,639,285; 1935-36, £ stg. 19,866,316.

3. *Imports of Merchandise from Eastern Countries.*—The value of imports into Australia from Eastern countries during the last five years is shown in the following table. The principal commodities imported in 1935-36, according to the countries of origin, were :—Ceylon—Tea, £797,368; India—Bags, Sacks and Hessians, £2,033,517; Netherlands East Indies—Tea, £1,116,374; Petroleum Spirit, £2,158,715; Petroleum, crude, £329,640; Kerosene, £302,374; Residual Oil, £435,913; Japan—Silk Piece goods, £1,666,357; Cotton and Linen Piece goods, £913,404; Other Textiles, £482,637.

IMPORTS OF MERCHANDISE INTO AUSTRALIA FROM EASTERN COUNTRIES.

British Currency Values.

Country of Origin.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£ stg.	£ stg.	£ stg.	£ stg.	£ stg.
China	314,778	266,938	285,514	364,127	657,178
Hong Kong	6,156	10,363	18,436	22,677	26,713
India and Ceylon	3,373,533	4,047,665	3,643,250	3,336,684	3,692,869
Japan	2,396,734	3,536,581	3,676,737	4,024,740	4,069,571
Malaya (British)	276,654	271,407	328,720	501,845	488,254
Manchuria including Kwantung Peninsula	(a)	(a)	(a)	3,906	8,156
Netherlands East Indies	2,648,919	2,930,951	3,960,233	4,390,327	4,928,025
Philippine Islands	35,947	34,899	59,733	79,885	92,610
Siam	2,218	1,512	1,822	1,879	6,403
Other Eastern Countries	25,504	41,311	37,781	74,423	83,993
Total	9,080,443	11,141,627	12,012,226	13,460,493	14,953,781

(a) Included with China.

By comparison with footnote (b) of the previous table, the balance of trade with Eastern countries can be ascertained and shows an excess of exports from Australia during each of the five years.

§ 8. Classified Summary of Australian Oversea Trade.

1. Imports.—The following table shows the value of imports into Australia during each of the last five years, arranged in accordance with the statistical classification which came into operation on 1st July, 1922 :—

IMPORTS TO AUSTRALIA.—CLASSES.

British Currency Values.

Classes.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(a)
	£ stg.	£ stg.	£ stg.	£ Stg.	£ Stg.
I. Animal foodstuffs, etc. ..	799,859	942,686	1,247,745	1,412,896	1,509,829
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	2,330,791	3,141,432	3,166,140	3,215,246	3,800,509
III. Alcoholic liquors, etc. ..	400,437	554,474	637,003	690,103	683,358
IV. Tobacco, etc. ..	711,848	718,282	1,342,790	1,614,226	1,714,960
V. Live animals ..	48,240	94,670	103,058	168,060	216,943
VI. Animal substances, etc. ..	833,454	1,193,026	1,060,893	1,488,143	1,467,304
VII. Vegetable substances, etc. ..	1,550,425	1,492,848	1,961,807	2,256,452	2,890,933
VIII. Apparel, textiles, etc. ..	17,323,303	15,994,563	17,735,864	17,292,334	17,642,742
IX. Oils, fats, and waxes ..	5,953,471	5,274,015	5,334,763	6,090,832	7,642,875
X. Paints and varnishes ..	301,366	353,557	445,261	400,591	575,347
XI. Stones and minerals, etc. ..	379,336	398,942	507,785	601,333	553,237
XII. Metals, metal manufactures, and machinery ..	10,128,134	13,049,506	19,301,432	25,206,625	27,271,497
XIII. Rubber and leather, etc. ..	644,782	743,636	1,000,357	1,185,812	1,832,824
XIV. Wood and wicker, etc. ..	1,265,780	1,403,049	1,847,866	1,934,055	1,790,902
XV. Earthenware, etc. ..	891,827	1,013,224	1,380,865	1,600,283	1,753,134
XVI. Paper and stationery ..	4,251,636	4,304,303	4,730,188	5,295,820	5,904,419
XVII. Jewellery, etc. ..	692,769	749,002	1,008,450	1,194,566	1,259,664
XVIII. Optical, surgical, and scientific instruments ..	940,694	987,369	1,074,590	1,218,299	1,282,825
XIX. Drugs, chemicals, etc. ..	3,687,498	3,384,857	3,537,218	4,370,127	4,520,237
XX. Miscellaneous ..	3,641,291	3,635,678	4,893,726	5,498,379	5,911,344
XXI. Gold and silver; and bronze specie ..	1,171,159	1,278,117	1,698,489	1,711,127	2,048,794
Total ..	58,013,860	66,712,926	74,119,496	85,252,458	92,533,787

(a) Preliminary figures, subject to revision.

2. Exports.—In the following table the exports from Australia are shown in classes according to the same classification as for imports, distinguishing (A.) Australian produce; (B.) Other produce (re-exports); and (C.) Total exports.

EXPORTS FROM AUSTRALIA.—CLASSES.

Australian Currency Values.

Classes.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(b)
A. AUSTRALIAN PRODUCE.					
	£ A.	£ A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	17,221,140	17,339,929	20,715,328	20,584,170	20,287,733
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	30,062,717	21,285,172	25,044,405	26,946,171	33,987,073
III. Alcoholic liquors, etc. ..	855,299	916,100	950,242	1,070,964	1,222,177
IV. Tobacco, etc. ..	171,771	125,563	117,975	156,600	193,840
V. Live animals ..	124,279	130,864	181,564	179,015	227,232
VI. Animal substances, etc. ..	39,198,506	61,884,060	43,163,366	58,505,775	70,380,830
VII. Vegetable substances, etc. ..	249,732	290,684	320,181	260,143	407,150
VIII. Apparel, textiles, etc. ..	323,029	328,794	381,752	375,088	531,502
IX. Oils, fats, and waxes ..	886,843	551,529	1,012,958	772,791	958,803
X. Paints and varnishes ..	57,289	68,954	98,298	110,681	155,878
XI. Stones and minerals, etc. ..	629,958	1,166,453	1,391,904	1,807,966	2,448,023
XII. Metals, metal manufactures, and machinery ..	4,283,711	1,765,727	1,753,582	6,811,780	9,102,280
XIII. Rubber and leather, etc. ..	469,473	701,490	582,244	741,206	1,008,181
XIV. Wood and wicker, etc. ..	377,913	608,579	883,796	963,382	1,052,700
XV. Earthenware, etc. ..	77,909	103,576	137,303	175,300	150,002
XVI. Paper and stationery ..	134,493	149,311	175,663	249,911	247,136
XVII. Jewellery, etc. ..	68,017	93,568	90,021	91,669	120,207
XVIII. Optical, surgical, and scientific instruments ..	121,911	103,495	123,912	119,168	157,461
XIX. Drugs, chemicals, etc. ..	437,595	459,332	546,971	573,029	771,675
XX. Miscellaneous ..	441,299	453,474	548,052	727,202	734,021
XXI. Gold and silver; and bronze specie ..	22,291,422	9,174,601	8,694,612	11,700,284	12,337,080
Total ..	118,409,356	120,651,925	109,913,129	132,010,145	156,586,167
	(a)	(a)	(a)	(a)	(a)

(a) Estimated British currency value, 1932-33, £ stg. 94,572,386; 1933-34, £ stg. 96,314,793; 1934-35, £ stg. 87,768,949; 1935-36, £ stg. 106,157,176; 1936-37, £ stg. 125,037,461.

(b) Preliminary figures, subject to revision.

EXPORTS FROM AUSTRALIA.—CLASSES—*continued.*

Classes.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(b)
B. OTHER PRODUCE.—RE-EXPORTS.					
<i>Australian Currency Values.</i>					
	£A.	£A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	9,977	8,701	11,442	12,778	19,047
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	77,704	72,381	69,706	62,904	57,720
III. Alcoholic liquors, etc. ..	17,848	40,121	21,989	30,096	33,512
IV. Tobacco, etc. ..	86,004	55,204	54,464	72,149	69,783
V. Live animals ..	18,922	13,018	13,855	30,461	23,469
VI. Animal substances, etc. ..	2,640	20,898	16,028	26,145	30,099
VII. Vegetable substances, etc. ..	7,118	4,806	6,204	5,204	16,154
VIII. Apparel, textiles, etc. ..	173,994	217,388	195,189	228,714	320,474
IX. Oils, fats, and waxes ..	80,371	42,505	37,371	87,489	168,394
X. Paints and varnishes ..	3,642	5,448	2,830	4,005	6,316
XI. Stones and minerals, etc. ..	1,132	1,299	878	1,475	1,755
XII. Metals, metal manufactures, and machinery ..	414,879	325,914	377,533	435,380	480,379
XIII. Rubber and leather, etc. ..	8,591	7,974	5,527	4,983	17,836
XIV. Wood and wicker, etc. ..	21,381	21,698	20,249	22,614	32,953
XV. Earthenware, etc. ..	6,350	8,099	8,554	8,030	8,403
XVI. Paper and stationery ..	52,518	36,141	37,239	78,104	78,593
XVII. Jewellery, etc. ..	30,281	34,879	39,124	111,196	64,890
XVIII. Optical, surgical, and scientific instruments ..	139,261	146,135	167,770	176,104	214,362
XIX. Drugs, chemicals, etc. ..	31,971	43,649	30,478	44,873	35,823
XX. Miscellaneous ..	105,820	85,896	177,049	141,960	189,908
XXI. Gold and silver; and bronze specie ..	1,242,657	1,595,820	1,761,829	1,855,962	2,079,132
Total	2,533,961 (a)	2,789,374 (a)	3,072,908 (a)	3,440,776 (a)	3,945,710 (a)

(a) Estimated British currency value, 1932-33, £ stg. 2,024,830; 1933-34, £ stg. 2,220,339; 1934-35, £ stg. 2,456,219; 1935-36, £ stg. 2,750,029; 1936-37, £ stg. 3,153,021. (b) Preliminary figures, subject to revision.

C. TOTAL EXPORTS.—AUSTRALIAN PRODUCE AND RE EXPORTS.

<i>Australian Currency Values.</i>					
	£A.	£A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	17,231,117	17,348,630	20,720,770	20,506,948	20,306,779
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	30,140,421	21,358,053	25,114,111	27,009,075	34,044,773
III. Alcoholic liquors, etc. ..	873,147	950,221	972,231	1,110,060	1,255,080
IV. Tobacco, etc. ..	256,575	180,767	172,439	228,749	203,623
V. Live animals ..	143,201	144,782	104,419	209,476	256,701
VI. Animal substances, etc. ..	39,201,146	61,905,858	43,170,994	58,531,020	70,110,038
VII. Vegetable substances, etc. ..	250,850	301,400	320,385	265,407	423,310
VIII. Apparel, textiles, etc. ..	497,023	546,182	570,941	603,502	854,790
IX. Oils, fats, and waxes ..	907,214	507,034	1,050,329	860,286	1,124,257
X. Paints and varnishes ..	60,031	74,402	101,128	123,086	162,104
XI. Stones and minerals, etc. ..	631,090	1,167,752	1,392,782	1,809,441	2,450,681
XII. Metals, metal manufactures, and machinery ..	4,623,670	5,032,711	5,130,115	7,247,160	9,672,668
XIII. Rubber and leather, etc. ..	478,064	709,464	587,771	746,279	1,026,017
XIV. Wood and wicker, etc. ..	399,204	630,277	613,045	685,990	1,085,655
XV. Earthenware, etc. ..	84,349	111,675	145,857	183,300	168,007
XVI. Paper and stationery ..	186,021	185,452	212,002	328,105	325,731
XVII. Jewellery, etc. ..	98,293	128,447	129,145	202,865	185,103
XVIII. Optical, surgical, and scientific instruments ..	261,172	240,630	201,682	295,272	371,823
XIX. Drugs, chemicals, etc. ..	409,536	502,981	586,419	617,002	807,408
XX. Miscellaneous ..	547,119	539,070	725,101	869,162	924,529
XXI. Gold and silver; and bronze specie ..	23,534,079	10,770,421	10,456,441	13,556,246	14,477,121
Total	120,943,317 (a)	123,441,299 (a)	112,986,037 (a)	136,381,221 (a)	160,531,883 (a)

(a) Estimated British currency value, 1932-33, £ stg. 96,597,225; 1933-34, £ stg. 98,572,632; 1934-35, £ stg. 90,225,168; 1935-36, £ stg. 108,007,205; 1936-37, £ stg. 128,191,082. (b) Preliminary figures, subject to revision.

3. Imports of Principal Articles. —The next table shows the quantity, where available, and the value of the principal articles imported into Australia during the last five years. The articles are listed in the order in which they appear in the detailed classification:—

PRINCIPAL COMMODITIES IMPORTED.—AUSTRALIA.

British Currency Values.

Article.		1932-33.	1933-34.	1934-35.	1935-36.	1936 37.(b)
Fish, preserved in tins	lb.	15,828,494	19,597,955	23,971,763	28,059,077	29,866,532
Tea	lb.	48,441,433	46,680,172	47,083,850	44,608,703	48,057,084
Whisky	gal.	1,270,948	2,174,035	2,084,489	2,078,334	2,441,712
Tobacco and preparations thereof	gal.	335,259	406,242	480,249	537,024	458,528
Copra	cwt.	360,285	427,638	486,082	553,551	490,222
Fibres	£	711,848	718,282	1,342,796	1,614,226	1,714,900
Hides and skins	£	267,475	233,788	356,181	374,780	375,012
Pulp for paper making	£	137,073	67,164	135,577	204,071	201,587
Seeds	£	458,842	425,844	469,802	644,464	900,805
Socks and stockings	£	430,442	476,844	614,720	611,041	599,799
Gloves	£	34,142	35,300	38,259	37,209	47,324
Hats and caps	£	240,995	28,165	20,162	33,301	634,080
Trimmings and ornaments	£	318,755	338,106	547,647	547,244	335,950
Other apparel and attire	£	7,092	12,851	21,389	34,900	355,850
Carpets and carpeting	£	309,145	288,558	327,524	369,421	147,942
Floorcloths and linoleums	£	124,561	146,786	141,714	157,886	301,000
Piece Goods—	£	310,217	255,477	313,245	333,246	755,018
Canvas and duck	£	528,987	612,843	690,854	771,690	1,175,469
Cotton and linen	£	599,174	703,087	925,541	1,085,153	541,785
Silk and artificial silk	£	202,005	291,890	352,073	420,245	505,568
Woolen or containing wool	£	383,493	390,052	511,875	507,284	4,571,947
All other piece goods	£	4,943,007	4,390,262	4,864,089	4,153,052	2,875,371
Sewing silks, cottons, etc.	£	2,771,277	2,543,386	2,901,694	2,704,410	286,688
Bags and sacks	£	111,171	179,800	245,448	260,871	1,666,728
Yarns—	£	1,896,814	1,615,128	1,872,585	1,972,457	470,418
Artificial silk	£	544,879	479,119	532,768	526,652	1,955,431
Cotton	£	2,596,201	2,059,805	1,464,436	1,677,322	625,002
Woolen	£	504,979	548,356	699,473	613,675	454,504
Other	£	586,998	479,400	548,565	435,027	53,628
Oils, in bulk—	£	52,332	35,162	39,070	80,560	48,942
Kerosene	gal.	36,647,723	31,155,716	33,482,226	38,770,667	45,617,561
Lubricating (mineral)	gal.	11,750,191	12,445,801	13,279,099	14,454,548	14,787,510
Petroleum	gal.	783,072	646,381	663,810	729,360	752,748
Residual and solar	gal.	239,217,947	266,226,956	267,632,864	310,336,547	334,863,868
Electrical machinery and appliances	£	3,704,511	3,340,990	3,167,255	4,332,043	5,083,754
Electrical cable and wire, covered	£	65,821,403	72,714,508	90,599,493	97,176,403	100,788,250
Agricultural machinery	£	363,831	411,205	548,843	521,166	550,500
Metal-working machinery	£	1,046,064	1,167,701	1,847,241	2,457,603	2,777,636
Motive power machinery	£	66,445	94,017	112,108	240,720	354,182
Iron and Steel—	£	376,324	454,214	645,955	903,582	1,075,088
Pipes and tubes	£	353,969	522,387	1,042,739	1,896,075	2,797,395
Plate and sheet	£	416,024	460,366	526,981	388,060	408,715
Cutlery and platedware	£	1,401,892	1,421,528	2,041,436	2,529,737	2,298,045
Tools of trade	£	344,292	315,408	389,385	482,740	511,452
Motor cars, chassis, bodies, and parts	£	516,197	585,142	751,207	877,247	871,390
Rubber and rubber manufactures	£	1,435,771	2,705,230	4,488,941	5,068,918	6,37
Timber, undressed, including logs (a)	sp. ft.	580,680	603,530	699,092	1,947,935	2,923,001
Crockery	£	884,411	1,002,815	1,356,523	1,116,167	1,269,091
Glass and glassware	£	390,584	382,395	492,852	532,750	510,380
Paper, printing	£	359,345	419,015	588,809	747,579	806,687
Stationery and paper manufactures	£	1,817,973	1,726,627	1,837,220	2,031,637	2,501,610
Cinematograph films	lin. ft.	1,111,626	1,360,956	1,600,000	1,780,001	1,711,032
Drugs, chemicals, and fertilizers	£	56,949,478	60,323,114	54,600,449	73,864,110	85,322,791
Arms and explosives	£	3,687,498	3,384,857	3,537,218	4,370,127	4,500,242
Musical instruments, pianos, etc.	£	538,650	610,833	608,841	693,435	570,067
Outside Packages	£	36,824	55,461	77,289	111,141	151,218
All other articles	£	1,524,882	1,506,932	1,857,507	2,097,275	2,102,824
	£	13,996,790	15,833,142	20,653,471	23,037,173	26,105,933
Total Imports	£	58,013,860	60,712,926	74,119,496	85,252,458	92,533,787

(a) Exclusive of undressed timber not measured in super. feet.
to revision.

(b) Preliminary figures, subject

4. Exports of Principal Articles of Australian Produce.—(a) *Quantities.* The following table shows the quantities of the principal articles of Australian produce exported during the last five years. The articles are listed in the order in which they appear in the detailed classification :—

PRINCIPAL COMMODITIES EXPORTED.—QUANTITIES, AUSTRALIA.

Article.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(b)
Butter .. .. .centl.	2,263,293	2,442,997	2,625,189	2,120,462	1,743,091
Cheese .. .. .centl.	117,852	93,137	108,294	129,726	139,336
Eggs in shell doz.	16,844,288	19,617,032	21,718,740	17,365,132	15,459,027
Milk and cream centl.	244,526	197,720	165,495	169,010	221,226
Fruits, dried centl.	1,063,245	1,454,867	1,277,789	1,114,976	1,204,302
Fruits, fresh centl.	2,750,353	2,402,877	2,284,592	2,517,494	1,981,127
Barley .. .. .centl.	1,525,569	1,350,954	1,450,854	1,730,042	1,333,072
Wheat .. .. .centl.	71,733,563	36,959,117	34,575,814	46,145,876	43,007,012
Flour .. .. .centl.	12,629,179	10,849,839	14,959,412	12,341,620	11,295,563
Sugar (cane) centl.	3,748,774	6,148,662	6,148,630	6,005,290	8,005,400
Wine .. .. .gal.	3,095,655	3,066,743	3,394,597	3,706,025	4,087,726
Tobacco, manufactured centl.	6,138	4,242	3,333	5,038	7,554
Wool (in terms of greasy wool) centl.	10,054,173	8,929,341	9,416,661	9,117,986	9,161,077
Pearlshell .. .. .centl.	32,975	33,721	43,467	56,406	52,058
Sandalwood .. .. .centl.	97,076	79,061	87,420	79,061	79,061
Tallow (unrefined) centl.	747,102	487,748	827,136	747,102	747,102
Coal .. .. .ton	282,977	292,416	305,139	282,977	282,977
Concentrates .. .. .centl.	1,598,344	2,818,036	2,212,324	2,212,324	2,212,324
Copper .. .. .centl.	168,195	105,389	11,072	11,072	11,072
Lead .. .. .centl.	3,632,208	3,687,298	3,673,347	3,673,347	3,673,347
Zinc—bar, block, dust centl.	699,380	646,945	537,650	537,650	537,650
Tin—ingots .. .. .centl.	19,571	24,794	22,097	22,097	22,097
Timber, undressed, including Logs (a) sup. ft.	26,508,661	45,507,512	36,911,000	40,307,040	44,064,464
Soap .. .. .centl.	89,946	71,521	54,371	54,371	54,371

(a) Exclusive of undressed timber not measured in super. feet.

(b) Preliminary figures, subject to revision.

(b) *Values.* The values of the principal articles of Australian produce exported during the same period as in the preceding table are given in the table hereunder :—

PRINCIPAL COMMODITIES EXPORTED.—VALUES, AUSTRALIA.

Australian Currency Values.

Article.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(c)
	£ A.	£ A.	£ A.	£ A.	£ A.
Butter	8,940,008	8,194,220	9,586,776	9,028,243	7,716,473
Cheese	318,895	229,313	493,977	337,467	383,974
Eggs in shell	958,065	1,058,164	1,148,254	910,892	954,578
Meats	5,998,187	7,094,371	8,846,110	7,522,842	10,322,842
Milk and cream	927,546	739,000	710,166	722,301	847,927
Fruits, dried	2,230,110	2,650,773	2,165,241	1,987,164	2,000,239
Fruits, fresh	2,417,437	2,011,695	1,821,932	2,026,860	1,979,899
Fruits, preserved in liquid	726,650	949,266	997,160	805,797	1,010,695
Barley	352,152	305,359	394,460	360,391	518,799
Wheat	17,804,849	8,873,987	11,612,368	14,050,975	18,700,372
Flour	4,148,973	3,266,718	4,607,383	4,510,882	5,506,250
Sugar (cane)	1,480,639	2,294,333	2,104,887	2,175,237	2,887,580
Wine	789,351	801,280	810,021	931,624	1,042,960
Tobacco, manufactured	159,097	111,664	100,867	142,408	180,519
Hides and skins	2,366,941	4,384,584	3,501,612	5,610,427	7,305,206
Wool	36,406,990	57,111,449	39,263,282	52,339,514	62,520,346
Pearlshell	233,786	198,347	218,463	302,491	310,631
Sandalwood	132,657	114,301	108,641	66,845	106,448
Tallow (unrefined)	790,405	494,400	927,740	661,465	800,947
Coal	281,512	269,296	273,305	276,553	300,842
Concentrates	297,100	816,439	759,296	1,130,167	1,816,770
Copper	248,897	230,935	9,797	25,874	43,557
Lead	2,384,062	2,418,072	2,410,023	3,837,381	4,817,749
Zinc—bar, block, dust	578,453	617,736	484,290	905,130	1,314,497
Tin—ingots	189,723	329,470	302,271	200,807	193,928
Leather	390,355	611,359	489,252	639,666	891,163
Timber, undressed, including Logs (a)	302,809	489,758	455,661	516,022	607,000
Soap	166,228	119,498	83,798	92,086	88,402
Gold	21,598,527	8,159,095	8,153,758	10,709,718	11,666,733
Silver	602,875	1,014,756	540,824	900,506	669,072
All other articles	4,086,987	4,690,727	6,531,508	7,835,401	8,845,687
Total Exports (Australian Produce)	118,409,356	120,651,925	109,913,129	132,940,445	156,586,167
	(b)	(b)	(b)	(b)	(b)

(a) Exclusive of undressed timber not measured in super feet. (b) Estimated British currency value—1932-33, £ stg. 94,572,386; 1933-34, £ stg. 96,313,293; 1934-35, £ stg. 87,768,040; 1935-36, £ stg. 106,157,176; 1936-37, £ stg. 125,037,461.

(c) Preliminary figures, subject to revision.

5. Imports of Merchandise, Specie and Bullion.—The table hereunder gives the value in British currency of imports into Australia during each of the last five years, grouped under the headings—Merchandise, and Specie and Bullion. The imports of merchandise are shown under the sub-headings of “free” and “dutiable” goods :—

IMPORTS OF MERCHANDISE, SPECIE AND BULLION—AUSTRALIA.

British Currency Values.

Year.	Merchandise.			Specie and Bullion.	Total Imports.
	Free Goods.	Dutiable Goods.	Total Merchandise.		
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
1932-33 ..	24,033,438	32,809,263	56,842,701	1,171,159	58,013,860
1933-34 ..	24,359,167	35,075,642	59,434,809	1,278,117	60,712,926
1934-35 ..	28,578,421	43,842,586	72,421,007	1,698,489	74,119,496
1935-36 ..	32,693,465	50,827,866	83,521,331	1,731,127	85,252,458
1936-37 (b) ..	(c)	(c)	90,484,993	2,048,794	92,533,787

(a) Estimated Australian currency value—1932-33, £A72,662,360; 1933-34, £A76,042,040; 1934-35, £A82,831,669; 1935-36, £A100,728,705; 1936-37, £A115,898,568. (b) Preliminary figures, subject to revision. (c) Not available.

6. Exports of Merchandise, Specie and Bullion.—The next table shows the recorded value of exports from Australia during each of the last five years, grouped under the headings—Merchandise, and Specie and Bullion, giving the exports of Australian Produce and Other Produce separately :—

EXPORTS OF MERCHANDISE, SPECIE AND BULLION—AUSTRALIA.

Year.	Merchandise.			Specie and Bullion.			Total Exports. (a)
	Australian Produce.	Other Produce.	Total Merchandise.	Australian Produce.	Other Produce.	Total Specie and Bullion.	
	£	£	£	£	£	£	£
1932-33 {	(b) 96,117,934	1,291,304	97,409,238	22,291,422	1,242,657	23,534,079	120,943,317
(c) 70,739,828	1,036,074	71,775,902	17,633,555	993,858	18,826,416	90,572,228	
1933-34 {	(b) 111,477,324	1,193,554	112,670,878	9,174,601	1,595,820	10,770,421	123,441,299
(c) 89,063,884	900,027	90,963,911	7,310,112	1,470,492	8,045,544	9,515,736	
1934-35 {	(b) 101,218,517	1,311,079	102,529,596	8,694,612	1,761,829	10,456,441	112,086,037
(c) 80,813,187	1,046,769	81,859,956	6,955,762	1,409,450	8,365,212	90,225,168	
1935-36 {	(b) 121,240,161	1,584,814	122,824,975	11,700,284	1,855,962	13,556,246	136,381,221
(c) 99,798,531	1,265,320	98,063,851	9,358,045	1,181,709	10,843,354	108,907,205	
1936-37 {	(b) 144,218,178	1,866,584	146,084,762	12,337,989	2,079,132	14,417,121	160,501,883
(d) 115,108,205	1,490,287	116,658,492	9,869,256	1,663,334	11,532,590	128,191,082	

(a) Does not include the value of Ships' Stores. See later table. (b) Australian currency values. (c) British currency values. (d) Preliminary figures, subject to revision.

7. Imports in Tariff Divisions.—In the following table the imports into Australia during the last five years have been classified in accordance with the sixteen divisions of the Customs Tariff.

IMPORTS IN TARIFF DIVISIONS—AUSTRALIA.

British Currency Values.

Tariff Division.	Imports.				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Ale, Spirits, and Beverages	272,661	522,240	619,171	724,243	810,479
II. Tobacco and preparations thereof ..	614,193	711,848	718,282	1,342,796	1,614,226
III. Sugar	9,461	12,167	13,784	18,213	21,542
IV. Agricultural Products and Groceries ..	3,752,673	3,709,621	4,669,232	5,359,517	5,832,041
V. Textiles, Felts and Furs, and Manufactures thereof, and Attire	12,502,068	15,473,427	14,249,414	15,589,378	15,456,564
VI. Metals and Machinery	5,943,193	8,071,275	9,440,968	13,462,994	17,659,405
VII. Oils, Paints, and Varnishes	5,208,357	6,195,643	5,546,801	5,707,247	7,380,167
VIII. Earthenware, Cement, China, Glass, and Stone	791,154	1,169,548	1,325,086	1,796,833	1,996,432
IX. Drugs and Chemicals	1,999,799	2,923,319	2,761,080	2,842,580	3,406,834
X. Wood, Wicker, and Cane	906,943	1,265,780	1,403,049	1,847,866	1,976,646
XI. Jewellery and Fancy Goods	1,122,774	1,278,446	2,516,918	1,476,572	1,807,147
XII. Hides, Leather, and Rubber	1,085,344	1,093,902	890,793	1,184,908	1,506,155
XIII. Paper and Stationery	4,034,000	4,517,000	4,523,400	5,010,840	5,324,305
XIV. Vehicles	743,448	2,075,555	3,642,192	5,685,833	7,885,946
XV. Musical Instruments	26,296	36,824	55,461	77,289	111,441
XVI. Miscellaneous ..	4,236,598	6,367,260	6,388,171	8,301,732	8,158,740
— Free Goods not specially mentioned in Tariff	793,094	1,418,177	670,918	1,992,166	2,363,201
Total Merchandise ..	44,042,662	56,842,701	59,434,809	72,421,007	83,521,331
Specie and Bullion ..	670,206	1,171,159	1,278,117	1,698,489	1,731,127
Grand Total	44,712,868	58,013,860	60,712,926	74,119,496	85,252,458

Consequent on the imposition of increased customs duties, prohibition of imports of certain goods and the economic depression, imports declined rapidly in 1931-32, the total value of merchandise imported being £44 million as against £131 million during 1929-30. Imports of merchandise increased to £57 million during 1932-33 and to £59 million during 1933-34 due to the partial removal of tariff restrictions, the replenishment of stocks and the improved economic conditions. Further expansion was recorded in 1934-35 and 1935-36, with increases in practically all tariff divisions, the total imports of merchandise in 1935-36 exceeding those of 1933-34 by £24,000,000.

8. Imports and Net Customs Revenue.—The percentage of net Customs revenue collected on the total value of all merchandise imported in each year was as follows:—1931-32, 26.5 per cent.; 1932-33, 23.5 per cent.; 1933-34, 24.4 per cent.; 1934-35, 23.1 per cent.; and 1935-36, 22.3 per cent. Primage duty was in force during the five years, and adding this to net customs revenue, the percentages were as follows:—1931-32, 33.0 per cent.; 1932-33, 29.8 per cent.; 1933-34, 29.8 per cent.; 1934-35, 27.8 per cent.; and 1935-36, 26.7 per cent. The percentages of net Customs revenue, omitting primage, on the total value of dutiable goods only were—1931-32, 45.2 per cent.; 1932-33, 40.6 per cent.; 1933-34, 41.3 per cent.; 1934-35, 38.2 per cent.;

and 1935-36, 36.6 per cent. The calculations are based on uniform currency values and on the assumption that the value of clearances approximated to the value of imports during the same period.

9. Protective and Revenue Customs Duties. In the following table the value of goods cleared for home consumption classified under protective and revenue duties and the gross duty collected are shown for the United Kingdom and other countries:—

IMPORTS CLEARANCES CLASSIFIED UNDER PROTECTIVE AND REVENUE DUTIES—AUSTRALIA.

Australian Currency Values.

Item.	1933-34.			1934-35.			1935-36.		
	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.
	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.
Dutiable Goods:—									
Protective..	6,589	5,204	11,793	8,499	6,568	15,067	9,417	7,639	17,056
Revenue ..	9,368	23,153	32,521	10,011	29,874	40,485	10,488	35,511	45,999
Total Dutiable Goods	15,957	28,357	44,314	19,110	36,442	55,552	19,905	43,150	63,055
Free Goods ..	15,819 (a)	15,588 (a)	32,111	19,753 (a)	17,363 (a)	37,922	21,911 (a)	20,042 (a)	43,364
Total All Goods ..	31,776 (a)	43,945 (a)	76,425	38,863 (a)	53,805 (a)	93,474	41,816 (a)	63,192 (a)	106,419

PERCENTAGE OF TOTAL GOODS CLEARED FOR HOME CONSUMPTION.

	%	%	%	%	%	%	%	%	%
Dutiable Goods:—									
Protective..	8.6	6.8	15.4	9.1	7.0	16.1	8.9	7.2	16.1
Revenue ..	12.3	30.3	42.6	11.3	32.0	43.3	9.8	33.4	43.2
Total Dutiable Goods	20.9	37.1	58.0	20.4	39.0	59.4	18.7	40.6	59.3
Free Goods ..	20.6	20.4	42.0	21.1	18.5	40.6	20.6	18.8	40.7
Total All Goods ..	41.5	57.5	100.0	41.5	57.5	100.0	39.3	59.4	100.0

GROSS CUSTOMS DUTY COLLECTED.

	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.	£A1,000.
Dutiable Goods:—									
Protective..	1,357	2,505	3,862	1,640	3,178	4,818	1,817	3,129	5,276
Revenue ..	1,596	13,446	15,042	1,707	15,241	16,948	1,825	17,236	19,061
Total Dutiable Goods	2,953	15,951	18,904	3,347	18,419	21,766	3,672	20,665	24,337

AVERAGE AD VALOREM RATE OF DUTY ON GOODS CLEARED FOR HOME CONSUMPTION.

	%	%	%	%	%	%	%	%	%
Dutiable Goods:—									
Protective..	20.6	48.1	32.8	19.3	48.4	32.0	19.6	44.0	30.9
Revenue ..	17.0	58.1	46.3	16.1	51.0	41.9	17.4	48.5	41.4
Total Dutiable Goods	18.5	56.3	42.7	17.5	50.5	39.2	18.5	47.9	38.6

(a) Exclusive of goods admitted free for Commonwealth, Consuls, etc., and free reimported not distributed according to United Kingdom and other origin.

§ 9. Ships' Stores.

Prior to 1906 goods shipped in Australian ports on board overseas vessels as ships' stores were included in the general exports. From 1906, ships' stores have been specially recorded as such, and have been omitted from the export figures. The value of these stores shipped each year during the period 1926-27 to 1935-36, showing bunker coal separately, is given in the following table:—

VALUE OF STORES SHIPPED ON OVERSEA VESSELS—AUSTRALIA.

Period.	Bunker Coal.	All Stores (including Coal).	Period.	Bunker Coal.	All Stores (including Coal).
	£ A.	£ A.		£ A.	£ A.
1926-27 ..	1,421,927	2,781,312	1931-32 ..	534,897	1,559,574 ^a
1927-28 ..	1,306,225	2,601,034	1932-33 ..	550,277	1,621,640 ^a
1928-29 ..	1,009,163	2,316,116	1933-34 ..	495,051	1,620,907 ^a
1929-30 ..	742,383	2,046,501	1934-35 ..	544,877	1,712,547 ^a
1930-31 ..	607,537	1,653,141 ^a	1935-36 ..	576,549	1,808,291 ^a

(^a) Estimated British currency value—1930-31, £ stg. 1,408,032; 1931-32, £ stg. 1,408,032; 1932-33, £ stg. 1,294,723; 1933-34, £ stg. 1,294,137; 1934-35, £ stg. 1,367,303; 1935-36, £ stg. 1,367,303.

In addition to bunker coal, the principal items of ships' stores supplied to overseas vessels in 1935-36 were—Oils, £562,927 (mainly fuel oils); meats, £188,149; butter, £39,155; fish, £40,877; and vegetables, fresh, £25,258.

The net Customs duty collected on ships' stores carried to Australia on overseas vessels and consumed in Australian waters amounted in 1935-36 to £53,227.

§ 10. Movement of Specie and Bullion.

1. Imports and Exports.—The following tables show the value of gold and silver specie and bullion, and of bronze specie imported into and exported from Australia during the years 1932-33 to 1936-37:—

IMPORTS AND EXPORTS, SPECIE AND BULLION—AUSTRALIA.

Items.	1932-33.	1933-34.	1934-35.	1935-36	1936-37. (b)
IMPORTS.					
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
Gold—Specie ..	683	466	206	1,093	69
Bullion ..	1,140,848	1,210,239	1,679,380	1,634,417	1,998,310
Total ..	1,141,531	1,210,705	1,679,586	1,635,510	1,998,379
Silver—Specie ..	20,220	57,642	3,957	77,939	33,554
Bullion ..	9,314	9,528	15,704	17,333	16,211
Total ..	29,534	67,170	18,761	95,272	49,765
Bronze—Specie ..	94	242	142	345	209
GRAND TOTAL ..	(a)1,171,159	(a)1,278,117	(a)1,698,489	(a)1,731,127	(a)2,048,353

(a) Estimated Australian currency value—1932-33, £A1,166,877; 1933-34, £A1,600,842; 1934-35, £A2,127,357; 1935-36, £A2,168,238; 1936-37, £A2,500,115. (b) Preliminary figures, subject to revision.

IMPORTS AND EXPORTS, SPECIE AND BULLION—AUSTRALIA.—*continued.*

Items.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.(c)
EXPORTS.					
	£ A.	£ A.	£ A.	£ A.	£ A.
Gold—Specie ..	14,435,404	340,656	206,618	994,924	181,777
Bullion ..	8,108,848	9,232,506	9,609,980	11,532,943	13,542,157
Total ..	22,544,252 (a)	9,573,162	9,816,598	12,527,867	13,723,934
Silver—Specie ..	336,132	231,518	106,122	151,671	101,947
Bullion ..	639,206	958,619	530,822	874,495	587,974
Total ..	975,338	1,190,137	636,944	1,026,166	689,921
Bronze—Specie ..	14,489	7,122	2,890	2,213	3,266
Total—					
Australian Produce ..	22,291,422	9,174,601	8,694,612	11,700,284	12,337,989
Other Produce ..	1,242,657	1,595,820	1,761,829	1,855,962	2,079,132
GRAND TOTAL ..	23,534,079 (b)	10,770,421 (b)	10,456,441 (b)	13,556,246 (b)	14,417,121 (b)

(a) Includes £(G)7,999,412 gold pounds shipped overseas from the Gold Reserve of the Australian Notes Fund, estimated value in Australian currency, £A14,082,352, and in British currency, £stg.11,265,636.

(b) Estimated British currency value—1932-33, £ stg. 18,826,416; 1933-34, £ stg. 8,615,844; 1934-35, £ stg. 8,305,212; 1935-36, £ stg. 10,843,354; 1936-37, £ stg. 11,532,590.

(c) Preliminary figures, subject to revision.

2. Imports and Exports by Countries.—The next table shows the imports and exports of specie and bullion from and to various countries during the year 1936-37 :—

IMPORTS AND EXPORTS OF SPECIE AND BULLION BY COUNTRIES.—AUSTRALIA, 1936-37.

Country.	Imports.			Exports.		
	Specie.	Bullion.	Total.	Specie.	Bullion.	Total.
	£ Stg.	£ Stg.	£ Stg.	£ A.	£ A.	£ A.
Australia (a) ..	25,119	..	25,119	..	..	..
United Kingdom ..	70	961	1,031	35,476	6,029,843	6,065,319
Ceylon ..	..	..	..	..	454,069	454,069
India ..	..	..	..	..	92,404	92,404
Malaya (British) ..	..	1,709	1,709	..	..	..
New Zealand ..	8,643	222,831	231,474	8,200	178	8,378
Pacific Islands—						
Fiji ..	..	149,066	149,066	1,794	158	1,952
Gilbert and Ellice Islands Colony ..	..	..	..	996	..	996
Nauru ..	..	..	..	1,092	..	1,092
Papua ..	..	91,557	91,557	4,176	..	4,176
Solomon Islands ..	..	..	..	8,675	..	8,675
Territory of New Guinea ..	..	1,548,203	1,548,203	56,331	..	56,331
Total, British Countries ..	33,832	2,014,327	2,048,159	116,740	6,576,652	6,693,392
France ..	..	..	..	..	25,737	25,737
Germany ..	..	..	..	..	14,814	14,814
Pacific Islands—						
New Hebrides ..	..	..	..	13,280	..	13,280
United States of America ..	..	194	194	156,970	7,512,928	7,669,898
Total, Foreign Countries ..	..	194	194	170,250	7,553,479	7,723,729
GRAND TOTAL ..	33,832	2,014,521	2,048,353 (b)	286,990	14,130,131	14,417,121 (c)

(a) Australian produce re-imported.

(b) Estimated Australian currency value—£A7,053,600.

(c) Estimated British currency value—£ stg. 11,532,590.

§ 11. Exports according to Industries.

1. *Classification.*—The following table gives an analysis of the exports of Australian produce according to the main classes of industry in which the goods were produced for the years 1934-35 and 1935-36 in comparison with those for the year 1913. The index-number based on the year 1913 shows the variations in the total recorded value only of exports in each industrial group, and has not been adjusted either for price-changes or in accordance with the variation of the Australian £ in relation to sterling.

A graph is published on page 486 of this chapter which shows the value of exports of Australian produce according to industrial groups from 1920-21 to 1935-36.

EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIAL ORIGIN.

VALUE OF EXPORTS.

Industrial Group.	1913. (a)		1934-35.		1935-36.	
	£A	Index No.	£A	Index No.	£A	Index No.
Agriculture	10,677,734	100	25,796,786	242	27,748,739	260
Pastoral	42,057,346	100	52,668,965	125	67,520,208	161
Dairy and Farmyard	3,854,734	100	12,020,519	312	11,218,330	291
Mines and Quarries (c)	21,926,310	100	12,597,660	57	16,854,828	77
Fisheries	424,849	100	272,897	64	351,408	83
Forestry	1,106,549	100	924,008	84	945,088	85
Total, Primary Produce	80,047,522	100	104,280,835	130	124,638,001	150
Manufacturing	2,304,693	100	4,828,794	210	5,936,860	258
Total	82,352,215	100	109,109,629	132	130,575,401	159
			(b)		(b)	

(a) Base year. (b) Estimated British currency value, 1934-35, £ std. 87,113,476, index-number 206; 1935-36, £ std. 101,251,863, index-number 127. (c) Australian production of gold substituted for exports of gold each year.

2. *Relative Importance of Industrial Groups.*—In the previous table the value of commodities in each industrial group of exports of Australian produce is that recorded at date of shipment from Australia, with the exception that the value of the production of gold in Australia in each year has been substituted in the Mines and Quarries group for actual shipments of gold in each year. This has been done to eliminate the exports of gold for monetary purposes. In order of importance the pastoral group occupied the highest place and in 1913 the value of commodities included in this group represented 51.1 per cent. of the total exports, as compared with 48.3 per cent. in 1934-35 and 51.7 per cent. in 1935-36. Wool constituted the greater part of the exports in the pastoral group and the increase in the group in 1935-36 compared with 1934-35 was entirely due to the higher prices realized for this commodity.

Exports of agricultural produce rank next in importance. Compared with the previous year the value of agricultural exports was nearly two millions higher in 1935-36 owing to increased exports of wheat combined with higher prices. From 13.0 per cent. of the total exports in 1913, agricultural produce increased to 23.6 per cent. in 1934-35 but decreased to 21.3 per cent. during 1935-36.

According to value, exports of dairy and farmyard produce increased from 4.7 per cent. in 1913 to 11.0 per cent. in 1934-35 but declined in 1935-36 to 8.5 per cent. Though the products of mines and quarries declined seriously subsequent to the year 1913, a partial recovery has been made in more recent years, the figures for 1935-36 representing 12.9 per cent. of the total exports. The manufacturing group of exports, which represented 2.8 per cent. in 1913, increased to 4.5 per cent. in 1935-36.

Compared with the year 1913, exports of agricultural produce in 1935-36 showed an increase of 160 per cent., pastoral produce 61 per cent., dairy and farmyard produce 191 per cent., the manufacturing group 158 per cent., and total exports 59 per cent. The exports of the products of mines and quarries and of fisheries and forests were much lower in 1935-36 than in 1913 but compared with 1934-35 the exports of the products of mines and quarries were 34 per cent. higher and of fisheries, though of minor importance, 29 per cent. higher.

3. Australian Production and Exports according to Industry.—The following table shows the total value of Australian production and Australian exports during the period of ten years, 1926-27 to 1935-36, classified according to industries; the proportion of each industrial group to total production and to total exports; and in the last column the percentage exported of the production of each industrial group:—

VALUE OF AUSTRALIAN PRODUCTION AND EXPORTS, ACCORDING TO INDUSTRY.

Australian Currency Values.

Industrial Group.	Value of Production during Ten Years.	Percentage on Total Production.	Value of Exports during Ten Years.	Percentage on Total Exports.	Percentage Exported of the Production in each Industrial Group.
	£A1,000.	%	£A1,000.	%	%
Agriculture	784,429	20.65	281,680	24.40	35.91
Pastoral	894,911	23.56	605,202	52.43	67.63
Dairy and Farmyard ..	454,125	11.95	99,120	8.59	21.83
Mining	189,506	4.99	111,082	9.62	58.62
Forestry and Fisheries ..	104,490	2.75	13,791	1.19	13.20
Total, Primary Produce ..	2,427,461	63.90	1,110,875	96.23	45.76
Manufacturing	1,371,292	36.10	43,490	3.77	3.17(a)
Total	3,798,753	100.00	1,154,365	100.00	30.39(a)

(a) See letterpress in the concluding paragraph of this section.

The figures relating to value of production and value of exports are subject to the qualifications mentioned previously. A period of ten years is embraced, and the values of production and of exports therein give a very fair index of the relative importance of the several industrial groups. Of the total production 63.90 per cent. was classified as primary produce and 36.10 per cent. as manufactured articles. The main contributing groups in the primary produce section were pastoral with 23.56 per cent., agriculture with 20.65 per cent., and dairy and farmyard produce with 11.95 per cent. of the total production.

Exports of primary produce represented 96.2 per cent. of the total exports. The primary groups in order of value were pastoral 52.4 per cent., agriculture 24.4 per cent., mining 9.6 per cent., dairy and farmyard 8.6 per cent., and forestry and fisheries 1.2 per cent. The manufacturing group accounted for the other 3.8 per cent.

The figures in the last column of the table are of special interest, as they show the percentage exported of the production of each industrial group. Of the total primary production during the period, 45.76 per cent. was exported. Approximately 36 per cent. of the agricultural production, 68 per cent. of the pastoral production, 22 per cent. of the dairy and farmyard production, 59 per cent. of the mining production, and 13 per cent. of the production of forestry and fisheries combined were sent abroad.

The total exports of gold bullion and specie are not included in the value of exports of the mining industry, the actual production of gold during the period being taken.

On account of the inherent difficulties of classifying production and exports by industries, the figures given for the manufacturing industry should not be interpreted too literally. In the first place, the value of manufacturing "production" stated is not the total value of output, but only the "value added" by manufacturing processes, while the value of manufactured exports represents the total value of the goods, including raw materials, etc. Secondly, some of the exported goods classified as primary produce have been increased in value by manufacturing processes, but have not been changed in form sufficiently to warrant their inclusion as manufactured products, e.g., flour, butter and sugar.

§ 12. Australian Index of Export Prices.

1. *The Old Annual Series.*—With the exception of the last few years an annual index of export prices has been published by the Commonwealth Bureau of Census and Statistics since its inception. An index was at first obtained by valuing the exports (other than gold) of each successive year at the prices of 1901, and dividing the values so obtained into the export values actually recorded. These computations were carried back to 1901. In 1918 the procedure was changed and brought into harmony with the methods adopted by the Bureau for constructing other price indexes. The average quantities of the principal exports (other than gold) for the nineteen years 1897 to 1916 were taken, and valued at the prices of each successive year. Comparisons of the resulting totals for different years were assumed to give the required comparisons of export price-levels for those years. The two methods would, however, give the same results only if the proportion of different exports for each year in question was the same as the average for the nineteen years. The proportion was, in fact, varying appreciably from year to year with the seasons. The old index was, therefore, based on a different system of weighting in each year, so that the results were not comparable for different years. The new method gave comparable and satisfactory results so long as the proportion of different exports was not widely different from the average of 1897 to 1916. After the war, however, the relative importance of different exports changed considerably. By about 1930 it began to appear that the change was great enough to throw some doubt on the accuracy of the index. It was published with increasing reluctance until 1929-30, after which it was withdrawn from publication.

Since that time endeavours have been made to design and compile new series of index-numbers which would reflect more accurately the short- and intermediate-period fluctuations in export prices. This task was completed some time ago and, after a preliminary period of trial, the new series of index-numbers were published in the form of a press notice on the 29th May, 1937.

2. *The New Monthly Series.*—An attempt has been made to overcome some of the difficulties occasioned by variations in the proportions of the different exports by compiling two separate series of monthly index-numbers. The first series is compiled in very much the same way as the old annual index-numbers, although certain important changes have been made in the data utilized. These are described below. For the present it may be noted that the purpose of this index is to provide comparisons, over a limited number of years, of the level of prices of those commodities normally exported from Australia, making no allowance for any benefit or disadvantage accruing from variations during the period in the relative proportions of the different kinds of exports. It is thus an index purely of price changes. The second series is designed for shorter-period comparisons—from one or more months of the current year to the corresponding months of the previous year. The latter is compiled in such a way as to take more close account of the actual quantities of each article exported at current prices; and hence to indicate with rather greater accuracy the extent to which price-movements have affected the actual value of our current exports. It will be clear, therefore, that the two series are designed to measure different things, any differences between the results being explicable on wider grounds than mere differences in formulæ.

Reference has already been made to the fact that the data on which the new series are based differ from those utilized in the old series of annual index-numbers. These changes apply to both of the new series.

The most important change is the use of actual (or calculated) export parities, based on actual price quotations, in place of the "unit-values" declared at the Customs. Declared unit-values are not satisfactory even in an annual index-number, partly because the returns are not always sufficiently accurate, and partly because there is a constant variation in the proportions of different grades and qualities included in the actual exports of any given period. An obvious example of the latter type of inaccuracy is furnished by the case of wool, the poorer grades of which are shipped during certain months of the off-season. In a monthly series of index-numbers, declared unit-values are even less satisfactory, as the difficulties are greatly magnified over short periods, during which the inaccuracies have little chance of averaging out.

Moreover, the export parities have in all cases been based on prices f.o.b. Australian ports. Where freight and selling charges form an appreciable percentage of the selling price, the use of unadjusted overseas quotations results in some distortion of the amplitude of the percentage fluctuations in prices.

The old index took no account of gold exports. The omission is natural and reasonable for countries which produce little or no gold. For gold-producing countries, although some exports of gold would be irrelevant (e.g., the Australian shipments of gold reserves during the depression), the exports of newly-produced gold should be taken into account. In the new series, therefore, gold is included, but the weight given to it is not the quantity exported but the quantity produced.

Each series of index-numbers takes account of 20 items, which constitute at present about 85 per cent. of the total value of exports of merchandise and silver and gold production.

3. Monthly Index (Fixed Weights.)—The "multipliers" used for the first series of index-numbers were, in round figures, the average annual exports (or production, in the case of gold) during the five years 1928-29 to 1932-33. This period was chosen several years ago as being fairly representative of the mutual relationship of the different export commodities over the period from 1928 to 1933 and, so far as it was possible to judge at the time, over the ensuing few years.

The twenty items, together with the units of quantity and the "multipliers", are given in the following table. It should be noted that (i) the "multiplier" allotted to wheat has been increased to take into account the "wheat equivalent" of flour exported, (ii) that allotted to greasy wool has been increased to take into account the "greasy equivalent" of scoured wool, tops and wool on skins, and (iii) those allotted to metals have been increased to take into account the metallic contents of ores and concentrates exported. This is the only satisfactory method of dealing with these commodities, for which it is not possible to secure satisfactory export price quotations in their own right.

EXPORT PRICE INDEX: WEIGHTING SYSTEM (1928-1936).

Item.	Unit of Quantity.	Quantity "Multipliers" for New Index-numbers.	Percentage Value "Weights" in 1935-36.	Percentage Actual Value in Exports of 1935-36.
1. Wheat (and wheat equivalent of flour)	bushel	125,000,000	20.83	16.57
2. Sultanas	ton	31,700	1.24	1.25
3. Lexias	ton	2,900	0.10	0.06
4. Currants	ton	13,500	0.40	0.34
5. Sugar (cane)	ton	211,000	1.76	1.94
6. Wool (as in the grease)	lb.	943,000,000	50.14	49.23
7. Tallow	cwt.	685,000	1.01	0.59
8. Cattle hides	lb.	26,000,000	0.52	0.55
9. Calf skins	lb.	1,000,000	0.05	0.12
10. Beef (frozen)	lb.	164,000,000	2.05	2.22
11. Lamb (frozen)	lb.	82,000,000	2.21	3.59
12. Mutton (frozen)	lb.	43,000,000	0.54	0.40
13. Pork (frozen)	lb.	4,800,000	0.12	0.52
14. Butter	cwt.	1,430,000	7.33	8.06
15. Silver	oz.	8,500,000	1.03	0.92
	(standard)			
16. Copper	ton	10,500	0.48	0.32
17. Tin	ton	940	0.23	0.25
18. Zinc	ton	108,000	2.07	1.29
19. Lead	ton	173,000	3.15	3.61
20. Gold (production)	oz.	565,000	4.74	8.17
	(fine)			
			100.00	100.00

The relative importance of the several items in the whole index is roughly indicated in the third column, which shows in percentage form the "value aggregates" for 1935-36, i.e., the average prices for that year multiplied by the "quantity multipliers". In the last column are shown comparable figures indicating the relative importance of each item in the actual exports of 1935-36. Divergencies in this one single year do not necessarily condemn the weighting system, which had to be based on a compromise between the demands of the eight and a half years for which the index has been compiled. In the case of wheat, gold and lamb, however, the divergencies are sufficiently substantial to warrant a revision of the "multipliers".

The revised "multipliers", which are based on the average annual exports (production, in the case of gold) during the three years 1933-34 to 1935-36, are shown in the following table. They have been used for the first time in the computations for July, 1936, the break of continuity being bridged by the usual method of splicing.

EXPORT PRICE INDEX : WEIGHTING SYSTEM (FROM 1st JULY, 1936).

Item.	Unit of Quantity.	Quantity "Multipliers" for New Index-numbers.	Percentage Value Weights if applied to 1935-36.
1. Wheat (and wheat equivalent of flour) ..	bushel	101,000,000	15.64
2. Sultanas	ton	38,200	1.38
3. Lexias	ton	3,000	0.10
4. Currants	ton	13,400	0.37
5. Sugar (cane)	ton	305,000	2.36
6. Wool (as in the grease)	lb.	975,000,000	48.19
7. Tallow	ewt.	600,000	0.82
8. Cattle hides	lb.	28,000,000	0.52
9. Calf skins	lb.	1,800,000	0.68
10. Beef (frozen)	lb.	182,000,000	2.10
11. Lamb (frozen)	lb.	138,000,000	3.45
12. Mutton (frozen)	lb.	44,000,000	0.52
13. Pork (frozen)	lb.	16,000,000	0.36
14. Butter	ewt.	2,140,000	10.20
15. Silver	oz.	7,300,000	0.85
16. Copper	(standard) ton	3,600	0.15
17. Tin	ton	1,300	0.30
18. Zinc	ton	99,000	1.77
19. Lead	ton	208,500	3.53
20. Gold (production)	oz. (fine)	937,000	7.31
			100.00

The monthly index-numbers of export prices in terms of Australian currency for the period January, 1928 to August, 1937 are set out in the following table. Index-numbers are also given of the same prices in terms of English sterling for the period July, 1929 to July, 1937. Differences in the value of English and Australian currency were sufficiently negligible to be ignored in the previous eighteen months.

AUSTRALIA: MONTHLY EXPORT PRICE INDEX.

(Base: 1928 = 1,000.)

Month.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
(i) IN TERMS OF AUSTRALIAN CURRENCY.										
January	1,036	944	761	514	595	548	785	580	772	957
February	1,036	935	708	537	593	518	750	567	770	934
March	1,052	902	672	587	562	510	739	564	785	988
April	1,058	888	689	585	552	510	726	605	790	1,000
May	1,061	851	694	578	547	501	676	644	790	982
June	998	798	673	553	533	607	648	652	747	946
July	997	831	647	535	550	659	620	656	769	950
August	975	825	635	509	580	661	627	664	804	950
September	965	818	597	515	604	708	581	714	790	..
October	936	775	544	597	567	676	564	749	820	..
November	946	804	543	646	553	714	557	741	893	..
December	936	795	519	595	550	710	550	736	920	..
Simple Average	1,000	847	640	564	566	616	653	656	805	..

(ii) IN TERMS OF ENGLISH STERLING.

January	1,036	944	747	428	475	438	627	463	616	764
February	1,036	935	691	428	473	414	606	453	622	746
March	1,052	902	645	451	449	407	590	450	627	789
April	1,058	888	648	449	441	412	580	483	631	799
May	1,061	851	653	443	437	448	540	514	631	784
June	998	798	633	425	426	485	517	521	596	755
July	997	824	609	411	439	526	495	524	612	763
August	975	817	597	391	493	528	501	530	642	758
September	965	808	562	395	482	565	464	570	631	..
October	936	764	503	458	453	540	450	598	655	..
November	946	792	499	496	442	570	445	592	713	..
December	936	782	477	474	439	567	439	588	735	..
Simple Average	1,000	842	605	437	452	492	521	524	643	..

4. Monthly Index (Changing Weights).—The second series of the new index-numbers is designed merely for comparisons with the corresponding month, or period of months, of the previous year. The same price quotations are used, but the "multipliers" are much more closely in accord with the actual experience of the periods in question.

For any given month, the procedure is to multiply the price of each commodity in that month, and its price in the corresponding month of the previous year, by the quantity exported during the given month. A comparison of the resulting aggregates gives one possible measure of the change in prices over the period; i.e., the change assuming that the proportions of the different kinds of exports whose prices are to be measured were the same as their proportions in the given month. Another possible measure is given by assuming that the proportions of the different kinds of exports in the given month had been the same as their proportions in the corresponding month of the previous year. Accordingly the first step in the procedure is repeated, substituting the quantities exported during the corresponding month of the previous year.

The index-numbers so obtained have been proved over a period of years to lie very close together. As it is convenient for practical reasons to have one single figure rather than two close alternatives the two index-numbers are multiplied together and the square root of the product extracted. This is taken to be the index-number for the month, the prices of the corresponding month of the previous year being taken as base. The above could have been expressed more shortly, of course, by saying that Fisher's "ideal" formula has been used.

The index-numbers for two or more months of one year, as compared with the corresponding period of the previous year, are computed in very much the same way. The process merely involves the cumulative addition of the aggregates computed for the individual months, and extraction of the index-numbers as explained above.

In order to indicate more clearly the method of computation followed, and to enable comparisons to be made with the results obtained from the first series of index-numbers, the following table sets out the data in detail for the trade year 1936-37.

AUSTRALIA: MONTHLY EXPORT PRICE INDEX (CHANGING WEIGHTS).

Month.	Index-numbers Based on Quantities of 1936-37.	Index-numbers Based on Quantities of 1935-36.	Final Index-numbers (on "Ideal" Formula).	Index-numbers Based on Standard "Multipliers" (First Series).
(a) INDIVIDUAL MONTHS.				
(Base: Prices in corresponding month of previous year = 1,000.)				
July	1,134	1,170	1,152	1,172
August	1,175	1,176	1,175	1,200
September	1,097	1,107	1,102	1,140
October	1,077	1,080	1,078	1,095
November	1,183	1,191	1,187	1,205
December	1,231	1,228	1,229	1,250
January	1,244	1,240	1,242	1,240
February	1,220	1,242	1,231	1,199
March	1,260	1,260	1,260	1,259
April	1,264	1,272	1,268	1,260
May	1,239	1,247	1,243	1,243
June	1,266	1,251	1,258	1,266

(b) PERIODS OF THE TRADE YEAR ENDING IN MONTH STATED.

(Base: Prices in corresponding period of previous year = 1,000.)

July	1,134	1,170	1,152	1,172
August	1,152	1,172	1,162	1,186
September	1,127	1,145	1,136	1,158
October	1,109	1,119	1,114	1,141
November	1,132	1,142	1,137	1,155
December	1,156	1,162	1,159	1,173
January	1,168	1,172	1,170	1,183
February	1,177	1,185	1,170	1,185
March	1,187	1,195	1,182	1,194
April	1,195	1,201	1,198	1,201
May	1,199	1,205	1,202	1,205
June	1,203	1,207	1,205	1,210

In addition to the matter published in the foregoing section, the press notice (P.N. 603) released for publication on 29th May, 1937, included export price index-numbers on the "changing weight" formula for 1934-35 and 1935-36, the old annual index referred to in paragraph 1 brought up to the end of 1935-36, and a statement giving the sources of the monthly export price quotations from which the index-numbers are computed. A limited supply of "P.N. 603" is available for distribution on application to the Bureau of Census and Statistics, Canberra.

Monthly export price index-numbers are now issued currently in regular press notices, which are usually available about two weeks after the end of the month.

§ 13. External Trade of Australia and other Countries.

1. *Essentials of Comparisons.*—Direct comparisons of the external trade of any two countries are possible only when the general conditions prevailing therein, and the system of record, are more or less identical. For example, in regard to the mere matter of record, it may be observed that in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of imports and exports in the one may be declared by merchants, whereas in the other they may be the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would arise from the different methods of converting the moneys of foreign countries, *i.e.*, from the application of current rates of exchange or of the mint par. Lastly, the figures relating to the external trade of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium than that of other countries. France and the United Kingdom also re-export largely, whereas in Canada, Australia and New Zealand the same class of trade represents a comparatively small proportion of the total trade.

2. *"Special Trade" of Various Countries.*—Special trade may be defined according to the interpretation of the British Board of Trade, as (*a*) imports entered for consumption in the country (as distinguished from imports for transshipment or re-export), and (*b*) exports of domestic products.

In the following table the figures relate as nearly as possible to imports entered for consumption in the various countries specified, and to exports of their domestic products. It is to be noted, however, that these figures do not invariably denote the same thing throughout, since, in the United Kingdom and other manufacturing countries, raw or partly manufactured materials are imported as for home consumption, and, after undergoing some process of manufacture or further modification, are re-exported as domestic production. Nevertheless, a comparison of this character reveals approximately the extent of the external trade which otherwise would not be manifest. The figures relating to foreign countries have been extracted from the *League of Nations Review of World Trade*.

IMPORTS FOR HOME CONSUMPTION, AND EXPORTS OF DOMESTIC PRODUCTS
(MERCHANDISE ONLY), VARIOUS COUNTRIES, 1935.

Country.	Trade.			Trade per Inhabitant.		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
	£1,000,000 Stg.	£1,000,000 Stg.	£1,000,000 Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.
Australia (a) ..	83.5	98.1	181.6	12 7 4	14 10 7	26 17 11
United Kingdom	701.6	425.9	1,127.5	15 12 3	9 9 7	25 1 10
Canada ..	112.3	170.0	282.3	10 16 5	16 7 8	27 4 1
India ..	101.1	118.4	219.5	0 5 9	0 6 9	0 12 6
New Zealand ..	28.5	35.4	63.9	19 8 10	24 3 0	43 11 10
Union of South Africa ..	77.5	99.9	177.4	9 5 2	11 18 8	21 3 10
Argentine Republic ..	70.6	92.7	163.3	5 19 2	7 16 6	13 15 8
Austria ..	45.8	34.0	79.8	7 0 2	5 4 1	12 4 3
Belgium ..	125.6	117.3	242.9	15 5 10	14 5 8	29 11 6
China ..	68.5	41.8	110.3	0 2 10	0 1 9	0 4 7
Manchuria ..	34.9	21.7	56.6	1 3 7	0 14 8	1 18 3
Czechoslovakia ..	56.9	62.7	119.6	3 17 3	4 5 2	8 2 5
Denmark ..	56.0	53.8	110.7	16 0 6	15 3 1	31 3 7
France ..	282.1	208.4	490.5	6 18 6	5 2 4	12 0 10
Germany ..	341.3	350.5	691.8	5 3 7	5 6 4	10 9 11
Italy ..	95.5	62.2	157.7	2 6 5	1 10 3	3 16 8
Japan ..	141.9	143.6	285.5	2 4 0	2 4 7	4 8 7
Netherlands ..	129.2	93.2	222.4	15 15 9	11 7 9	27 3 6
Netherlands East Indies ..	38.1	64.5	102.6	0 12 6	1 1 3	1 13 9
Norway ..	41.2	30.4	71.6	14 12 10	10 16 0	25 8 10
Poland ..	33.1	35.0	68.7	1 0 9	1 2 3	2 3 0
Soviet Union (Russia) ..	42.6	64.9	107.5	0 5 2	0 7 10	0 13 0
Sweden ..	75.7	66.6	142.3	12 4 7	10 15 2	22 19 9
Switzerland ..	83.3	52.5	135.8	20 9 8	12 18 3	33 7 11
United States of America ..	415.8	457.4	873.2	3 7 9	3 14 6	7 2 3

(a) Year ended 30th June, 1930.

§ 14. Trade of the United Kingdom with Australia compared with that of Competing Countries.

Proportion of Trade from United Kingdom and Competing Countries.—The failure of the United Kingdom to maintain the position formerly held in the import trade of Australia has been a matter of more than ordinary interest for some years. Since 1908 permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in the United Kingdom with regard to Australian trade affairs. From the 8th August, 1907, the Commonwealth Customs Tariffs have provided preferential rates of Customs Duties on certain goods the produce or manufacture of the United Kingdom with the object of assisting the British manufacturer to retain or improve his position in this market, in relation to other countries. The main provisions in these Acts relating to preference are dealt with on previous pages in this Chapter.

In an investigation into the relative position occupied by the United Kingdom in the import trade of Australia, the comparison must, of course, be restricted to those classes of goods which are produced or manufactured in the United Kingdom. The imports to Australia include many commodities, such as tea, rice, raw coffee, unmanufactured tobacco, petroleum products, copra, timber, etc., which the United Kingdom could not supply. These items, in addition to others not available from that country, have, therefore, been omitted from the computation hereunder.

The imports into Australia have been classified under nine headings, and the trade of the United Kingdom therein is compared with that of France, Germany, Japan and the United States. These countries have been selected as the principal competitors with the United Kingdom for the trade of Australia under the specified headings. Totals for the five years 1913 and 1932-33 to 1935-36 are shown in the table hereunder:—

AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES.

British Currency Values.

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	U.S. of America.	All Countries.
		£stg.	£stg.	£stg.	£stg.	£stg.	£stg.
Foodstuffs of animal origin	1913 ..	301,025	3,003	12,071	6,088	280,220	647,497
	1932-33	186,479	1,327	456	29,136	147,155	799,859
	1933-34	223,575	1,058	1,088	28,729	149,923	942,086
	1934-35	244,439	1,517	835	50,111	228,194	1,247,745
	1935-36	217,197	1,260	..	64,668	216,112	1,412,896
Spirituos and alcoholic liquors	1913 ..	1,227,561	343,394	143,426	1,689	2,805	1,947,244
	1932-33	402,322	27,883	1,310	2	64	460,437
	1933-34	473,020	49,707	2,020	8	233	554,474
	1934-35	582,099	58,002	5,581	10	1,546	637,005
	1935-36	602,630	49,706	2,098	..	1,670	696,103
Apparel, textiles, and manufactured fibres	1913 ..	12,254,561	961,025	1,712,395	475,973	623,542	19,935,750
	1932-33	9,319,033	585,183	4,063,334	2,460,347	26,247	17,323,393
	1933-34	8,753,708	378,838	3,36,385	2,501,039	247,267	15,994,505
	1934-35	10,149,806	323,138	3,58,816	3,274,845	334,433	17,735,864
	1935-36	9,470,808	258,601	489,483	3,223,969	280,505	17,229,354
Metals, metal manufactures, and machinery	1913 ..	13,905,483	217,148	2,380,152	7,657	3,817,705	21,670,213
	1932-33	6,158,088	51,136	474,423	95,455	1,784,015	10,128,131
	1933-34	8,253,238	34,449	567,655	133,078	2,485,077	13,049,599
	1934-35	11,013,603	48,486	645,619	180,782	5,021,100	19,301,432
	1935-36	13,550,189	30,267	1,043,439	237,560	6,848,650	25,206,625
Paper and stationery	1913 ..	1,789,577	21,030	266,483	10,656	403,679	3,134,756
	1932-33	522,615	67,238	116,995	41,022	234,166	4,251,636
	1933-34	2,679,052	50,465	117,399	39,776	198,605	4,304,303
	1934-35	2,820,803	55,860	132,243	52,016	246,904	4,764,188
	1935-36	3,052,473	52,786	208,138	78,785	202,198	5,295,820
Jewellery, time-pieces, and fancy wares	1913 ..	521,290	88,070	263,688	19,307	138,217	1,442,292
	1932-33	150,625	21,208	94,909	128,140	15,858	692,769
	1933-34	165,311	20,259	95,826	167,708	17,606	749,002
	1934-35	220,252	19,497	114,133	178,990	44,702	1,008,450
	1935-36	232,717	19,545	127,992	195,592	71,047	1,194,566
Earthenware, cements, glass, etc.	1913 ..	650,138	40,245	453,188	21,493	62,887	1,565,727
	1932-33	448,465	11,033	41,476	179,371	53,936	891,827
	1933-34	520,686	10,481	57,194	181,487	77,819	1,018,224
	1934-35	714,236	9,391	103,862	215,766	107,155	1,380,865
	1935-36	879,191	8,115	170,663	227,804	127,791	1,090,283
Drugs, chemicals, and fertilizers	1913 ..	1,020,647	245,426	304,179	139,178	210,758	2,721,902
	1932-33	1,359,671	261,253	319,804	143,889	605,615	3,687,498
	1933-34	1,413,095	258,920	300,523	101,558	490,347	3,384,857
	1934-35	1,561,789	208,707	330,850	116,744	498,178	3,537,218
	1935-36	1,902,253	215,782	352,333	175,803	622,350	4,370,127
Rubber and leather and manufactures thereof, and substitutes therefor	1913 ..	485,216	68,686	347,045	688	433,837	1,717,035
	1932-33	197,365	8,306	27,678	17,791	71,489	644,782
	1933-34	176,566	7,861	24,992	20,829	60,975	743,536
	1934-35	198,514	4,994	24,572	36,706	72,443	1,000,457
	1935-36	218,850	5,024	28,082	40,250	98,325	1,185,812
Total, above-mentioned imports	1913 ..	32,155,498	1,989,017	5,882,627	683,629	5,982,059	55,082,613
	1932-33	21,073,123	1,037,572	11,855,040	3,101,130	3,175,145	38,880,303
	1933-34	22,658,851	812,047	15,503,080	3,174,152	3,727,852	40,741,341
	1934-35	27,449,541	729,601	17,105,111	4,106,870	6,554,835	50,613,322
	1935-36	30,162,108	641,995	24,222,228	4,241,433	8,558,718	58,344,586
Total imports (less bullion and specie)	1913 ..	40,948,803	2,222,631	7,029,325	950,300	10,907,512	78,196,169
	1932-33	23,543,988	1,195,470	11,317,036	3,536,581	8,081,047	56,842,701
	1933-34	25,144,441	956,335	19,020,676	3,676,737	7,838,082	59,434,809
	1934-35	30,786,096	862,147	21,453,315	4,624,740	11,041,365	72,421,007
	1935-36	33,833,435	790,108	27,093,049	4,969,571	13,901,326	83,518,869

Stated as percentages the figures in the preceding table are shown below :—
AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES.—PERCENTAGES.

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	U.S. of America.	All Countries
		%	%	%	%	%	%
Foodstuffs of animal origin	1913 ..	31.77	0.33	1.27	0.74	30.52	100
	1932-33	23.31	0.17	0.06	3.04	18.40	100
	1933-34	23.72	0.11	0.12	3.05	15.90	100
	1934-35	19.59	0.12	0.06	4.02	18.20	100
	1935-36	17.50	0.09	0.00	4.58	15.30	100
Spirituous and alcoholic liquors	1913 ..	63.04	17.64	7.37	0.09	0.14	100
	1932-33	87.38	6.05	0.28	0.00	0.01	100
	1933-34	85.41	8.96	0.06	0.00	0.04	100
	1934-35	82.59	9.11	0.88	0.00	0.24	100
	1935-36	86.57	7.14	0.30	0.00	0.24	100
Apparel, textiles, and manufactured fibres	1913 ..	61.43	4.82	8.59	2.39	3.13	100
	1932-33	53.80	3.38	2.36	14.24	1.52	100
	1933-34	54.73	2.37	2.10	15.64	1.55	100
	1934-35	57.23	1.82	2.02	18.40	1.89	100
	1935-36	54.80	1.50	2.53	18.04	1.02	100
Metals, metal manufactures, and machinery	1913 ..	64.17	1.00	10.98	0.04	17.62	100
	1932-33	64.04	0.54	4.68	0.24	17.61	100
	1933-34	63.24	0.02	4.35	1.02	19.04	100
	1934-35	57.06	0.25	3.34	0.94	26.01	100
	1935-36	53.70	0.12	4.14	0.94	27.17	100
Paper and stationery	1913 ..	57.41	0.70	8.50	0.31	12.88	100
	1932-33	59.33	1.58	2.75	0.96	5.51	100
	1933-34	62.24	1.17	2.73	0.92	4.61	100
	1934-35	59.21	1.17	2.73	1.11	5.18	100
	1935-36	57.64	1.00	3.03	1.10	5.52	100
Jewellery, time-pieces, and fancy goods	1913 ..	36.14	6.11	18.28	1.34	9.58	100
	1932-33	21.74	3.06	13.70	18.50	2.20	100
	1933-34	22.07	2.70	12.70	22.39	2.35	100
	1934-35	21.84	1.93	11.32	17.75	4.43	100
	1935-36	10.48	1.04	10.71	10.37	5.95	100
Earthenware, cements, glass, etc.	1913 ..	41.52	2.57	28.94	1.37	4.02	100
	1932-33	50.29	1.24	4.65	20.11	6.05	100
	1933-34	51.14	1.03	5.62	17.82	7.64	100
	1934-35	51.72	0.08	7.52	15.63	7.76	100
	1935-36	52.01	0.48	10.01	13.18	7.50	100
Drugs, chemicals, and fertilizers	1913 ..	37.49	9.02	11.18	5.11	7.74	100
	1932-33	36.87	7.08	8.67	3.90	10.42	100
	1933-34	41.75	7.65	8.88	3.00	14.49	100
	1934-35	44.15	5.90	9.35	3.30	14.08	100
	1935-36	43.53	1.91	8.00	4.02	14.24	100
Rubber and leather and manufactures thereof, and substitutes thereof	1913 ..	28.26	4.00	20.21	0.04	25.27	100
	1932-33	30.60	1.29	4.20	2.76	11.00	100
	1933-34	23.74	1.06	3.36	2.80	8.20	100
	1934-35	19.84	0.50	2.46	3.67	7.24	100
	1935-36	18.46	0.50	2.37	3.30	6.20	100
Total above-mentioned articles	1913 ..	58.38	3.61	10.68	1.24	10.86	100
	1932-33	54.20	2.67	3.82	7.98	8.17	100
	1933-34	55.62	1.99	3.69	7.79	9.15	100
	1934-35	54.23	1.44	3.39	8.11	12.95	100
	1935-36	51.70	1.10	4.13	7.27	14.67	100
Total imports (less bullion and specie)	1913 ..	52.37	2.84	8.99	1.22	13.95	100
	1932-33	41.38	2.10	3.22	6.22	14.22	100
	1933-34	42.31	1.61	3.23	6.19	13.19	100
	1934-35	42.51	1.19	2.96	6.39	15.25	100
	1935-36	40.51	0.95	3.55	5.95	10.64	100

The total value of the commodities included in the competitive classes increased from £55,082,613 during 1913 to £122,631,500 during 1920-27, but declined during the economic depression to £20,576,008 in 1931-32. Subsequently the total value rose to £58,344,586 in 1935-36. The principal classes of competitive imports are (a) metals, metal manufactures and machinery (value £25,200,025 in 1935-36) and (b) apparel, textiles and manufactured fibres (value £17,202,354 in 1935-36). The value of goods included in these two groups represented 73 per cent. of the total value of competitive commodities during 1934-35 and 1935-36.

In 1935-36 the United Kingdom supplied 51.70 per cent. of the total value of competitive goods which compares unfavourably with any year since 1926-27. In 1913 the corresponding figure was 58.38 per cent. and in 1934-35, 54.23 per cent. In seven of the nine competitive groups of imports, the proportion supplied by the United Kingdom declined during 1935-36 as compared with the previous year. In the two groups, spirituous and alcoholic liquors and earthenware, cements, glass, etc., which reported gains, the share of the total purchases supplied by the United Kingdom was 86.57 per cent. and 52.01 per cent. respectively.

The share of Japan in the competitive trade increased in proportion to other countries from 1.24 per cent. in 1913 to 7.27 per cent. in 1935-36, though this figure was exceeded in each of the previous three years. The most important classes of competitive goods imported from Japan are silk piece goods, cotton and linen piece goods, yarns, crockery, fancy goods and sulphur. The total value of imports from Japan in the competitive groups during 1935-36 was £4,244,431, and of this total silk piece goods valued at £1,666,357 represented 39 per cent., and cotton and linen piece goods valued at £913,124 represented 22 per cent., or together 61 per cent. of the total competitive goods imported from Japan.

The position of the United States of America in the competitive trade improved from 10.86 per cent. in 1913 to 23.52 per cent. in 1928-29, but a progressive decline from 1929-30 reduced the percentage to 8.17 in 1932-33. In the last two years a marked improvement was recorded, the United States' share in 1935-36 representing 14.67 per cent. of the total. Of the total competitive trade from this country approximately 80 per cent. was represented by metals, metal manufactures and machinery.

The position of France declined from 3.61 per cent. in 1913 to 1.10 per cent. in 1935-36. Apparel, textiles, and drugs, chemicals and fertilizers are the most important imports from France.

The proportion of the imports supplied by Germany in 1913 was 10.68 per cent. as compared with 58.38 per cent. from the United Kingdom; 3.61 per cent. from France; 1.24 per cent. from Japan; and 10.86 per cent. from the United States. The percentage of the imports from Germany in 1935-36 was 4.15 per cent., as compared with 0.80 per cent. in 1923-24. The principal classes of imports from Germany are manufactured metals and machinery, apparel and textiles, and drugs and chemicals.

§ 15. Oversea Trade in Calendar Years.

For the purpose of comparison with countries which record overseas trade in calendar years the following table has been compiled to show Australian imports and exports for each quarter of the calendar years 1933 to 1936:—

OVERSEA TRADE, AUSTRALIA.—CALENDAR YEARS.

Year	Merchandise.		Bullion and Specie.		Total.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£ Stg.1,000	£1,000.	£ Stg.1,000	£1,000.	£ Stg.1,000	£1,000.
QUARTER ENDED MARCH.						
1933 ..	13,505	{ (R) 30,527 (S) 24,373 }	348	{ (R) 16,005 (S) 13,285 }	13,853	{ (R) 47,135 (S) 37,658 }
1934 ..	14,663	{ (R) 32,884 (S) 26,255 }	318	{ (R) 2,663 (S) 2,130 }	14,981	{ (R) 35,547 (S) 28,385 }
1935 ..	18,317	{ (R) 28,890 (S) 23,065 }	389	{ (R) 2,221 (S) 1,777 }	18,706	{ (R) 31,111 (S) 24,842 }
1936 ..	21,456	{ (R) 38,157 (S) 30,464 }	349	{ (R) 3,010 (S) 2,408 }	21,805	{ (R) 41,167 (S) 32,872 }
QUARTER ENDED JUNE.						
1933 ..	12,930	{ (R) 20,926 (S) 16,705 }	273	{ (R) 2,527 (S) 2,020 }	13,203	{ (R) 23,453 (S) 18,728 }
1934 ..	15,942	{ (R) 18,391 (S) 14,683 }	343	{ (R) 2,900 (S) 2,320 }	16,285	{ (R) 21,291 (S) 17,003 }
1935 ..	17,367	{ (R) 20,121 (S) 20,854 }	436	{ (R) 2,623 (S) 2,000 }	17,803	{ (R) 28,744 (S) 22,953 }
1936 ..	19,955	{ (R) 24,095 (S) 19,230 }	465	{ (R) 3,000 (S) 2,300 }	20,420	{ (R) 27,095 (S) 21,538 }
QUARTER ENDED SEPTEMBER.						
1933 ..	13,981	{ (R) 21,888 (S) 17,475 }	333	{ (R) 2,490 (S) 1,902 }	14,314	{ (R) 24,378 (S) 19,407 }
1934 ..	18,398	{ (R) 17,100 (S) 13,657 }	434	{ (R) 2,030 (S) 2,104 }	18,832	{ (R) 19,736 (S) 15,701 }
1935 ..	20,122	{ (R) 19,913 (S) 15,898 }	397	{ (R) 2,954 (S) 2,331 }	20,519	{ (R) 22,807 (S) 18,261 }
1936 ..	22,803	{ (R) 21,870 (S) 17,468 }	563	{ (R) 3,470 (S) 2,776 }	23,366	{ (R) 25,349 (S) 20,244 }
QUARTER ENDED DECEMBER.						
1933 ..	14,849	{ (R) 30,507 (S) 31,543 }	284	{ (R) 2,718 (S) 2,174 }	15,133	{ (R) 42,225 (S) 33,717 }
1934 ..	18,339	{ (R) 30,413 (S) 24,282 }	438	{ (R) 2,982 (S) 2,380 }	18,777	{ (R) 33,395 (S) 20,008 }
1935 ..	21,987	{ (R) 39,754 (S) 31,740 }	527	{ (R) 4,070 (S) 3,255 }	22,514	{ (R) 43,824 (S) 34,095 }
1936 ..	22,899	{ (R) 45,140 (S) 36,045 }	501	{ (R) 3,502 (S) 2,801 }	23,400	{ (R) 48,648 (S) 38,846 }
TOTAL FOR YEAR.						
1933 ..	55,465	{ (R) 112,848 (S) 90,009 }	1,238	{ (R) 24,343 (S) 19,471 }	56,503	{ (R) 137,191 (S) 109,570 }
1934 ..	67,342	{ (R) 98,794 (S) 78,877 }	1,533	{ (R) 11,175 (S) 8,940 }	68,875	{ (R) 109,969 (S) 87,817 }
1935 ..	77,793	{ (R) 114,678 (S) 91,557 }	1,749	{ (R) 11,868 (S) 9,494 }	79,542	{ (R) 120,540 (S) 101,051 }
1936 ..	87,113	{ (R) 129,277 (S) 103,216 }	1,878	{ (R) 12,982 (S) 10,384 }	88,991	{ (R) 142,250 (S) 113,000 }

(R) Recorded values, Australian currency.

(S) British currency values.

§ 16. Excise.

Although excise goods have no immediate bearing on oversea trade the rates of excise duty are in some cases related to the import duty on similar goods. Moreover as the Excise Acts are administered by the Department of Trade and Customs it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of Customs and Excise Revenue are shown in Chapter XXVII.—Public Finance, B. § 2.

QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY WAS PAID.—AUSTRALIA.

Article.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Spirits—	proof gal.	proof gal.	proof gal.	proof gal.	proof gal.
Brandy (Pure Australian Standard Brandy) ..	143,297	146,152	166,229	171,067	181,428
Brandy (Blended Wine Brandy, etc.) ..	1,103	334			
Gin (Distilled from Barley, Malt, Grain, or Grape Wine, etc.) ..	137,353	148,930	169,776	199,328	221,370
Whisky (Australian Standard Malt Whisky) ..	142,107	139,259	143,217	164,875	157,359
Whisky (Australian Blended Whisky) ..	67	..			
Rum (Australian Standard Rum) ..	283,129	280,985	318,058	323,938	337,562
Liqueurs ..	1,148	1,956	2,833	3,506	3,661
Spirits, n.e.i. ..	148	50	25	50	28
Spirits for Industrial or Scientific Purposes ..	98,738	97,409	104,198	111,860	114,622
Spirits for Fortifying Wine (Distilled from Doradillo Grapes) ..	280,365	216,093	662,103	669,498	759,257
Spirits for Fortifying Wine	450,624	188,484			
Spirits for making Vinegar	29,906	19,014	15,820	17,377	19,138
Amylic Alcohol and Fusel Oil ..	69	14	25	16	27
Concentrated Grape Must ..	14,149	8,384	9,895	7,163	30,448
Total, Spirits ..	1,582,203	1,247,064	1,592,179	1,668,678	1,830,900
Spirit for manufacture of Scents, etc. ..	liq. gal. 40,967	liq. gal. 39,515	liq. gal. 44,805	liq. gal. 50,328	liq. gal. 55,093
Beer ..	gal. 47,667,903	gal. 48,981,805	gal. 53,301,143	gal. 58,079,741	gal. 64,690,532
Tobacco — Manufactured, n.e.i. ..	lb. 13,370,263	lb. 13,597,478	lb. 13,735,473	lb. 13,915,260	lb. 14,556,348
Tobacco—Hand-made ..	122,566	75,198	152,451	173,302	41,903
Total, Tobacco ..	13,492,829	13,672,676	13,887,924	14,088,562	14,598,251
Cigars—Machine-made ..	39,582	41,097	46,131	55,040	53,770
Cigars—Hand-made ..	199,120	191,808	214,067	200,007	168,036
Total, Cigars ..	238,702	232,905	260,198	255,047	221,806

QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY
WAS PAID—AUSTRALIA—*continued*.

Article.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	lb.	lb.	lb.	lb.	lb.
Cigarettes—Machine-made	4,054,064	4,455,456	4,517,558	4,770,793	5,189,500
Cigarettes—Hand-made ..	826	612	440	271	551
Total, Cigarettes ..	4,054,890	4,456,068	4,517,998	4,770,064	5,190,051
	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.
Cigarette Tubes and Papers	1,579,456	43,810,859	69,637,478	73,828,386	81,566,257
	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.
Matches	333,190	2,909,390	3,086,433	3,355,327	2,994,258
	gal.	gal.	gal.	gal.	gal.
Petrol	19,044,324	20,130,190	23,351,682	28,405,489	28,831,464
	doz. packs.	doz. packs.	doz. packs.	doz. packs.	doz. packs.
Playing Cards	111,719	116,341	109,079	112,229	107,127

§ 17. Interstate Trade.

Prior to the federation of the Australian Colonies (now States), each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution Act (Section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the latest published statements were for the year 1909. Later the Governments of Western Australia and Tasmania revived the records, and statistics of the subject are available again for those States.

At the Conference of Statisticians held in January, 1928, it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities.

The Government Statist for South Australia publishes some figures for that State made up from the records of Western Australia and Tasmania, and from various other sources. The statistics of interstate trade for New South Wales, Victoria and Queensland are very meagre. The Melbourne Harbour Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged in the Port of Melbourne. The trade with individual States is not disclosed.

CHAPTER XVII.—LABOUR, WAGES AND PRICES.

A.—PRICES.

§ 1. Wholesale Prices.

1. *General.*—The results of an investigation into wholesale prices in Melbourne from 1871 to the end of September, 1912, were given in some detail in Labour Report No. 1. Since 1912, a monthly index-number has been published. Details of monthly figures are to be found in the Labour Reports and in the Quarterly Summaries of Australian Statistics issued by this Bureau.

2. *Index-Numbers.*—The index-numbers for eight groups of commodities and for all groups together are shown in the following table, with the prices in the year 1911 as the base of each group. The index-numbers are not comparable horizontally :—

INDEX-NUMBERS.—WHOLESALE PRICES, MELBOURNE.

(Base of each Group : Year 1911 = 1,000.)

Year.	I. Metals and Coal.	II. Jute, Leather, Wool, etc.	III. Agri- cultural Produce, etc.	IV. Dairy Produce.	V. Gro- ceries.	VI. Meat.	VII. Building Materials.	VIII. Chem- icals.	All Groups.
1861 ..	1,438	1,381	1,583	1,008	1,961	..	1,070	2,030	1,538
1871 ..	1,096	1,257	1,236	864	1,586	..	1,044	1,409	1,229
1881 ..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,121
1891 ..	895	847	1,024	995	1,032	888	780	1,194	945
1901 ..	1,061	774	928	1,029	1,048	1,345	841	917	974
1911 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1913 ..	1,016	1,070	1,097	1,054	1,024	1,252	1,128	995	1,086
1914 ..	1,099	1,032	1,207	1,137	1,021	1,507	1,081	1,253	1,149
1915 ..	1,284	1,017	1,162	1,530	1,133	2,435	1,275	1,528	1,604
1916 ..	1,695	1,423	1,208	1,485	1,322	2,515	1,491	1,760	1,504
1917 ..	2,129	2,008	1,157	1,423	1,343	2,403	1,881	2,171	1,662
1918 ..	2,416	2,309	1,444	1,454	1,422	2,365	2,086	3,225	1,934
1919 ..	2,125	2,363	1,985	1,651	1,516	2,348	2,851	2,808	2,055
1920 ..	2,298	2,624	2,439	2,209	1,918	3,279	3,226	2,825	2,480
1921 ..	2,173	1,362	1,767	2,000	1,976	2,158	2,733	2,303	1,903
1922 ..	1,942	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,758
1923 ..	1,826	2,148	1,778	1,837	1,746	2,579	2,025	1,933	1,944
1924 ..	1,835	2,418	1,647	1,655	1,721	2,223	1,815	1,806	1,885
1925 ..	1,852	1,967	1,707	1,636	1,723	2,212	1,711	1,790	1,844
1926 ..	1,938	1,582	2,001	1,784	1,731	1,931	1,665	1,816	1,832
1927 ..	1,962	1,650	1,826	1,823	1,724	2,111	1,624	1,866	1,817
1928 ..	1,912	1,781	1,726	1,751	1,707	2,015	1,744	1,923	1,794
1929 ..	1,912	1,556	1,792	1,853	1,690	2,246	1,754	1,942	1,803
1930 ..	1,866	1,727	1,484	1,627	1,666	2,025	1,875	1,982	1,596
1931 ..	1,826	1,939	1,421	1,399	1,794	1,568	2,025	2,166	1,428
1932 ..	1,736	1,000	1,230	1,303	1,767	1,348	2,043	2,127	1,411
1933 ..	1,713	1,118	1,175	1,195	1,714	1,487	2,061	2,106	1,409
1934 ..	1,660	1,261	1,288	1,274	1,735	1,540	2,015	2,018	1,471
1935 ..	1,602	1,217	1,344	1,325	1,729	1,568	1,964	1,996	1,460
1936 ..	1,566	1,331	1,480	1,351	1,731	1,684	1,969	1,997	1,543

NOTE.—The figures given in this table are comparable in the vertical columns but are not directly comparable horizontally.

The index-numbers up to the year 1911 are based on the prices of eighty commodities, but since that year the number has been increased to ninety two.* The commodities taken into account are given in detail in each Labour Report, with the average prices for the year. The commodities included are chiefly basic foods and raw materials,

* In the computation of the index-numbers for years prior to 1911, the aggregate expenditure on 80 commodities in 1911 is taken as base = 1,000, while for later years the aggregate expenditure on 92 commodities is taken.

so that the index is more akin to the "Economist" or "Statist" index-numbers in England than to the official index-numbers of the United States or of Canada. The prices are weighted according to the estimates of Australian consumption per head in the years 1901 to 1911. For this purpose data were incomplete, and consumption in the State of Victoria was used as the basis for a number of commodities. The prices for farm and station products have been taken from market reports, and those of other commodities from trade journals or from information supplied by representative firms.

3. *Revision of the Index.*—Changes that have taken place since 1912 have altered considerably the relative consumption of different commodities. New commodities which should be taken into account have come into use, and in a number of other respects, the index-number requires revision. It is, moreover, desirable to give index-numbers for different classes of commodities, for farm products and for manufactured goods, and again for imported commodities and for those produced in Australia. Revision on these lines is now almost completed, and results will be ready for publication in the near future.

§ 2. Retail Prices and Housing.

1. *Introduction.*—Reference must be made generally to the Labour Reports for explanations and full tables of retail price index-numbers. In Report No. 1 (1912) will be found a general description of method, which is summarized in succeeding issues. Report No. 9, Appendix I. (1919) contains an extensive memorandum on price indexes by the late Sir George H. Knibbs.

2. *Index-Numbers.*—There are several "series" of retail price index-numbers covering different ranges of commodities. They may be grouped as follows:—

(a) *Food and Groceries*, subdivided into groceries, dairy produce and meat.

Index-numbers are computed monthly for five representative towns in each State (the "30 towns"), for Canberra, and for a few other special towns. Index-numbers are computed annually in November for 200 towns, including those referred to above (*see* § 4, following). The same regimen of Food and Groceries is used throughout all the retail price indexes that follow.

(b) *Food and Housing.* Figures for housing are collected as at the middle of each quarter and combined with food prices to give a quarterly index of food and housing. For the 30 towns, there are two index-numbers, one taking into account the rents of houses of four and five rooms only ("B" Series) and the other rents of all houses ("A" Series) — the latter formerly used by the Commonwealth Arbitration Court. The first is usually given with the period 1923–1927 as base, and the second with 1911 as base. For the 200 towns, four-roomed and five-roomed houses are separately combined with food, and the base is 1911.

(c) *All Household Expenditure.* Prices have been collected annually since 1919, and quarterly since 1925 in the "30 towns" for other household expenditure in two groups, "Clothing" and "Miscellaneous", the latter including household utensils, fuel, light, tobacco and a number of other items. These prices are combined with food prices and housing (four and five-roomed houses) to give the "All Items" ("C" Series) index of retail prices. The base is the period 1923 to 1927 (*see* § 3 following). From the 1st May, 1931, this index almost wholly replaced the "A" Series as regards wages regulated by the Commonwealth Arbitration Court, but from 1st July, 1937, has been supplanted by the "Court" Series (based on the "C" Series) specially created by the Court for use in connexion with its wage adjustments.

For all these index-numbers full information is given in the Labour Reports. The latest available information is to be found in the Quarterly Summaries of Australian Statistics.

3. **Food and Housing: Six Capital Cities.**—(i) *Food and Groceries.* The index-numbers for the three groups comprising food and groceries are shown in the following table:—

RETAIL PRICE INDEX-NUMBERS, FOOD AND GROCERIES.—CAPITAL CITIES.

(Base: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

City.	1907.	1911.	1914.	1921.	1932.	1933.	1934.	1935.	1936.
Sydney	523	553	646	1,062	852	800	825	840	848
Melbourne	517	523	610	1,063	758	713	748	784	809
Brisbane	530	569	603	1,014	735	699	727	763	791
Adelaide	532	570	679	1,066	761	731	767	780	798
Perth	670	753	728	1,116	804	757	807	821	853
Hobart	565	592	678	1,133	797	757	786	792	827
Weighted Average (a) ..	533	559	640	1,064	796	751	783	806	825

(a) For all capital cities.

(ii) *Housing.* In issues of the Official Year Book prior to No. 19, the computations of index-numbers of housing accommodation were based upon the rentals of all houses from under four rooms to seven rooms and over. Since 1925, houses of four and five rooms only have been taken into account in accordance with a resolution of the Conference of Statisticians at Adelaide in 1924. The following table is on this basis, but the old index is still computed for the use of the Commonwealth Arbitration Court (see Appendix).

INDEX-NUMBERS.—HOUSING.(a) CAPITAL CITIES.

(Base: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

City.	1907.	1911.	1914.	1921.	1932.	1933.	1934.	1935.	1936.
Sydney	593	701	760	989	894	864	869	891	930
Melbourne	455	569	628	820	816	801	808	850	882
Brisbane	283	373	466	630	641	681	691	720	766
Adelaide	510	706	655	809	691	694	700	736	795
Perth	458	524	580	739	810	795	794	792	844
Hobart	405	452	518	881	868	860	865	890	908
Weighted Average (b) ..	497	612	662	862	817	804	810	839	879

(a) 4 and 5 roomed houses.

(b) For all capital cities.

(iii) *Food, Groceries and Housing (4 and 5-roomed Houses) combined.* The following table shows the index-numbers for food, groceries and housing (4 and 5-roomed houses) for each capital city.

RETAIL PRICE INDEX-NUMBERS—FOOD, GROCERIES AND HOUSING.(a)—CAPITAL CITIES. ("B" Series.)

(Base: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

City.	1907.	1911.	1914.	1921.	1932.	1933.	1934.	1935.	1936
Sydney	548	606	687	1,036	867	822	840	858	878
Melbourne	495	539	616	977	778	742	769	808	835
Brisbane	442	500	554	877	704	690	713	747	781
Adelaide	524	618	671	975	736	716	742	764	796
Perth	594	672	679	982	805	768	802	810	849
Hobart	508	542	621	1,044	822	792	814	827	856
Weighted Average (b) ..	520	578	648	992	803	768	792	818	844

(a) 4 and 5 roomed houses.

(b) For all capital cities.

4. **Retail Price Index-Numbers in Terms of Currency.**—The tables previously given are now converted into money units by substituting 20s. od. for the base of 1,000. The figures for the last six quarters are added to the yearly figures. The figures show the

sums which would have to be paid in each city and in each year in order to purchase such quantities of the several commodities and such housing as would in the aggregate cost £1, according to the weighted average prices and housing in the six capitals in the five-yearly base period 1923-1927:—

RETAIL PRICES.—AMOUNTS NECESSARY ON THE AVERAGE IN EACH YEAR TO PURCHASE IN EACH CAPITAL CITY WHAT WOULD HAVE COST ON THE AVERAGE £1 DURING THE PERIOD 1923-1927, IN THE SIX CAPITAL CITIES AS A WHOLE. ("B" Series.)

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Cities.
FOOD AND GROCERIES.							
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1907	10 6	10 4	10 7	10 8	13 5	11 4	10 8
1911	11 1	10 6	11 5	11 5	15 1	11 10	11 2
1914	12 11	12 2	12 1	13 7	14 7	13 7	12 10
1921	21 3	21 3	20 3	21 4	22 4	22 8	21 3
1932	17 1	15 2	14 9	15 3	16 1	15 11	15 11
1933	16 0	14 3	14 0	14 7	15 2	15 2	15 0
1934	16 6	15 0	14 7	15 4	16 2	15 9	15 8
1935	16 10	15 8	15 3	15 7	16 5	15 10	16 1
1936	17 0	16 2	15 10	16 0	17 1	16 6	16 6
1936 { March Qtr.	16 11	15 8	15 8	15 5	16 3	15 10	16 2
June "	16 9	15 11	15 5	16 0	17 1	15 11	16 3
Sept. "	16 11	16 11	15 9	16 0	17 8	16 11	16 8
Dec. "	17 4	16 7	16 5	16 1	17 4	17 5	16 11
1937 { March "	17 5	16 4	16 10	16 3	17 4	17 3	16 11
June "	17 2	16 6	16 5	16 5	18 1	17 4	16 10

HOUSING (4 AND 5 ROOMS).

1907	11 10	9 1	5 8	10 2	9 2	8 1	9 11
1911	14 0	11 5	7 6	14 1	10 6	9 0	12 3
1914	15 2	12 7	9 4	13 1	11 9	10 4	13 3
1921	19 9	16 5	12 7	16 2	14 9	17 7	17 3
1932	17 11	16 4	12 10	13 10	16 2	17 4	16 4
1933	17 3	16 0	13 7	13 11	15 11	17 2	16 1
1934	17 5	16 2	13 10	14 0	15 11	17 4	16 2
1935	17 10	17 0	14 5	14 9	15 10	17 10	16 9
1936	18 7	17 8	15 4	15 11	16 11	18 2	17 7
1936 { March Qtr.	18 4	17 7	14 7	15 1	16 4	18 1	17 3
June "	18 7	17 7	14 9	15 4	16 5	18 2	17 5
Sept. "	18 7	17 0	15 0	16 11	17 9	18 7	17 9
Dec. "	18 11	17 10	16 2	16 2	17 1	17 9	17 10
1937 { March "	19 0	18 0	16 4	16 3	17 2	17 10	18 0
June "	19 2	18 1	16 5	16 5	17 2	17 11	18 2

FOOD, GROCERIES AND HOUSING (4 AND 5 ROOMS).

1907	11 0	9 11	8 10	10 6	11 11	10 2	10 5
1911	12 1	10 9	10 0	12 4	13 5	10 10	11 7
1914	13 9	12 4	11 1	13 5	13 7	12 5	13 0
1921	20 9	19 6	17 6	19 6	19 8	20 11	19 10
1932	17 4	15 7	14 1	14 9	16 1	16 5	16 1
1933	16 5	14 10	13 10	14 4	15 4	15 10	15 4
1934	16 10	15 5	14 3	14 10	16 1	16 3	15 10
1935	17 2	16 2	14 11	15 3	16 2	16 7	16 4
1936	17 7	16 8	15 7	15 11	17 0	17 1	16 11
1936 { March Qtr.	17 5	16 4	15 3	15 4	16 3	16 8	16 7
June "	17 5	16 6	15 2	15 9	16 10	16 9	16 8
Sept. "	17 0	16 11	15 9	16 0	17 8	17 7	17 1
Dec. "	17 11	17 1	16 3	16 1	17 2	17 6	17 3
1937 { March "	18 0	16 11	16 7	16 2	17 3	17 6	17 3
June "	17 11	17 1	16 4	16 5	17 8	17 6	17 4

§ 3. Variations in the Cost of Food, Groceries, Housing, Clothing and Miscellaneous Household Requirements. ("C" Series.)

1. **General.**—The index-numbers in § 2 show the variations in the cost of food, groceries and housing. The expenditure on these items covers approximately 60 per cent. of the total expenditure of the ordinary household. The balance is expended on clothing, boots, fuel, light, and such miscellaneous items as renewals of furniture, furnishings, drapery, crockery, lodge dues, trade union dues, recreation, newspapers, etc. The Royal Commission on the Basic Wage in 1920 recommended in its report that a method should be adopted of ascertaining from time to time the rise and fall in the purchasing-power of money in its relation to the total household expenditure. The Government adopted the recommendation, and the duty of carrying out the necessary investigations was entrusted to the Bureau of Census and Statistics, which adopted the methods hereunder described.

2. **Methods Adopted.**—After careful investigation it was decided to adopt for food, groceries and housing, the commodities, method and weighting used by this Bureau. The commodities and quantities adopted for food and groceries conform very closely to those given in the Indicator Lists of the Commission. With regard to housing, the Commission adopted a certain type of five-roomed house as its standard for determining the amount allowed for housing. The investigations made by this Bureau are not confined to a particular type of house, but the average rentals paid for houses of four and five rooms are taken. The results can be used with safety to show the variations in the type of house described by the Commission.

The investigations of this Bureau advisedly had been confined to food, groceries and housing, and it was necessary, therefore, to make investigations into the cost of clothing and miscellaneous household requirements. With regard to clothing, the Basic Wage Commission collected a large amount of information as to prices and life of articles, and this has been utilized in computing the index-numbers given in the following tables.

With regard to Miscellaneous items, which cover a very wide field, inquiries were made as to variations in cost of fuel and light, household utensils, drapery, crockery, etc., also in respect of other items included in the Indicator Lists for Miscellaneous items, and the aggregate cost of these items has been computed in the same manner as that for clothing.

3. **Period Selected as Base.**—For the new series of index-numbers, November, 1914 was adopted as base, owing to the difficulty of securing information with regard to prices of clothing and miscellaneous items for earlier years. Prior to and including the 4th Quarter ended December, 1920, the index-numbers were computed on this base, but in accordance with the decision of a conference of Statisticians to adopt a post-war period as base, the index-numbers since the Quarter ended March, 1930, have been computed to the five-yearly period—1923–1927—as base (= 1,000), and the figures for past years have been re-computed to the same base.*

This series assumed importance owing to its adoption by the Commonwealth Arbitration Court, from the 1st May, 1934, for the fixation and adjustment of wages regulated by the Court. From 1st July, 1937, the Court has adopted its own series of Index-numbers—the "Court" Series—for the purpose mentioned. These are, however, based on the "C" Series.

Similar index-numbers indicating the separate movement of the Clothing and Miscellaneous items will be found in the annual Labour Reports.

4. **Variations in Cost in the Principal Towns.**—The following table gives the combined index, generally known as the "All-Items" ("C" Series) index, for all household expenditure, for the thirty-two towns in respect of which the tabulation is made:—

* These Indexes may be converted to the 1914 base by multiplying them by 1.4550.

THE "ALL ITEMS" INDEX.

("C" Series.)

RETAIL PRICE INDEX—NUMBERS.—COST OF FOOD, GROCERIES, HOUSING (4 AND 5 ROOMS), CLOTHING AND MISCELLANEOUS HOUSEHOLD REQUIREMENTS.

(Base: Weighted Average of Six Capital Cities, 1923-37 = 1,000.)

State and Town.	Nov- ember, 1921. •	Year 1929.	Year 1930.	Year 1931.	Year 1932.	Year 1933.	Year 1934.	Year 1935.	Year 1936.	1937.	
										Mar. Qtr.	June Qtr.
NEW SOUTH WALES—											
Sydney ..	1,046	1,073	1,026	922	867	832	842	852	866	884	884
Newcastle ..	1,041	1,028	991	888	840	819	834	856	853	846	846
Broken Hill ..	975	1,018	973	882	834	806	819	819	845	878	802
Goulburn ..	1,033	1,108	1,039	922	877	843	852	860	864	857	866
Bathurst ..	947	979	959	867	820	801	807	814	833	842	830
Weighted Average, 5 Towns ..	1,042	1,067	1,022	918	863	830	841	852	865	880	880
VICTORIA—											
Melbourne ..	1,003	1,017	956	846	813	789	801	824	844	854	863
Ballarat ..	992	957	909	808	776	760	781	803	826	834	835
Bendigo ..	1,002	969	926	833	808	789	811	820	821	833	838
Geelong ..	1,019	980	917	822	794	772	782	824	848	847	848
Warrnambool ..	1,034	960	939	860	838	812	826	850	851	849	852
Weighted Average, 5 Towns ..	1,003	1,011	951	843	811	787	801	824	843	853	861
QUEENSLAND—											
Brisbane ..	923	923	859	798	764	751	762	780	804	836	833
Toowoomba ..	949	916	885	816	788	778	785	785	802	842	842
Rockhampton ..	972	904	868	806	779	752	759	776	802	838	839
Townsville ..	..	1,026	966	914	878	850	851	852	866	881	882
Bundaberg ..	..	..	..	..	..	..	..	..	..	806	808
Weighted Average, 5 Towns ..	941b	922b	863b	801b	768b	753b	764b	780b	803b	839	830
SOUTH AUSTRALIA—											
Adelaide ..	989	1,037	952	837	802	789	806	820	830	845	854
Kadina, etc. ..	998	943	885	801	772	747	758	763	765	765	760
Port Pirie ..	1,025	980	927	834	791	762	778	780	813	830	840
Mount Gambier ..	1,029	963	918	831	816	800	800	809	818	825	829
Peterborough ..	948	1,043	980	884	848	832	832	833	843	844	848
Weighted Average, 5 Towns ..	992	1,030	948	836	801	787	804	817	835	841	850
WESTERN AUSTRALIA—											
Perth, etc. ..	1,008	1,026	977	885	840	811	830	834	856	850	876
Kalgoorlie, etc. ..	1,048	1,032	986	937	940	937	975	1,011	1,027	1,028	1,035
Northam ..	1,030	1,022	969	878	844	814	825	829	860	877	895
Bunbury ..	1,045	978	966	877	842	824	843	865	880	885	900
Geraldton ..	1,050	1,051	1,029	951	904	851	866	886	933	909	973
Weighted Average, 5 Towns ..	1,020	1,026	979	891	852	825	842	848	870	875	891
TASMANIA—											
Hobart ..	1,070	1,000	956	875	844	825	837	849	860	865	872
Launceston ..	1,067	967	949	865	832	817	828	834	840	845	854
Burnie ..	1,003	966	918	837	811	775	780	792	814	836	850
Devonport ..	904	948	920	831	800	773	787	801	800	825	833
Queenstown ..	1,031	972	949	881	875	867	876	873	850	846	850
Weighted Average, 5 Towns ..	1,057	986	951	869	838	820	831	841	850	855	864
Weighted Average for 30 Towns ..	1,013	1,026	971	870	829	803	816	831	848	862	867
Weighted Average for 6 Capital Cities ..	1,013	1,033	975	873	830	804	817	832	850	864	868
Charters Towers (Q.) ..	1,025	939	883	827	794	762	759	789	810	818a	820a
Warwick (Q.) ..	994	931	882	815	777	757	761	769	779	837a	842a
Port Augusta (S.A.) (a)	1,035	1,061	1,026	914	853	814	822	832	841	781	776

(a) Not included in above weighted averages.

(b) Includes Charters Towers and Warwick in place of Townsville and Bundaberg.

* Figures for the country towns are only available from 1921, but the corresponding index-numbers for the Six Capital Cities for November, 1914, to November, 1920 appear on next page.

THE "ALL ITEMS" INDEX.

(The "C" Series.)

SIX CAPITAL CITIES, 1914-1920. RETAIL PRICE INDEX NUMBERS SHOWING
THE COST OF FOOD AND GROCERIES, HOUSING (4 AND 5 ROOMS),
CLOTHING AND MISCELLANEOUS HOUSEHOLD REQUIREMENTS.

(Base of each Section: Weighted Average of Six Capital Cities 1923-27 = 1,000.)

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals. (a)
FOOD AND GROCERIES.							
Nov. 1914 ..	638	616	614	683	746	687	641
" 1915 ..	844	835	860	858	819	858	842
" 1916 ..	833	791	748	835	854	807	812
" 1917 ..	877	798	825	805	828	949	836
" 1918 ..	877	843	882	862	816	918	861
" 1919 ..	1,073	975	1,069	1,012	987	1,041	1,026
" 1920 ..	1,225	1,220	1,117	1,225	1,113	1,293	1,209
HOUSING (4 AND 5 ROOMS).							
Nov. 1914 ..	758	608	403	611	586	525	649
" 1915 ..	780	611	472	574	581	571	659
" 1916 ..	791	625	467	573	592	574	665
" 1917 ..	797	657	492	606	602	586	685
" 1918 ..	832	699	526	656	619	614	722
" 1919 ..	866	744	604	707	650	746	768
" 1920 ..	980	807	634	783	718	904	851
FOOD, GROCERIES AND HOUSING.							
Nov. 1914 ..	680	613	500	658	689	630	644
" 1915 ..	825	756	722	758	734	756	777
" 1916 ..	818	732	648	742	761	724	760
" 1917 ..	848	748	707	734	748	820	782
" 1918 ..	861	792	756	789	740	810	812
" 1919 ..	1,000	893	904	904	867	936	934
" 1920 ..	1,138	1,074	945	1,068	973	1,155	1,082
CLOTHING.							
Nov. 1914 ..	755	780	657	756	698	825	754
" 1915 ..	805	797	690	821	760	833	792
" 1916 ..	903	870	779	919	849	940	881
" 1917 ..	1,009	976	899	1,049	980	1,041	992
" 1918 ..	1,102	1,103	1,025	1,066	1,135	1,200	1,097
" 1919 ..	1,237	1,213	1,192	1,303	1,277	1,344	1,238
" 1920 ..	1,323	1,422	1,274	1,384	1,359	1,430	1,365
MISCELLANEOUS.							
Nov. 1914 ..	766	728	770	770	780	699	749
" 1915 ..	798	770	756	803	822	770	786
" 1916 ..	808	784	766	832	869	780	802
" 1917 ..	880	879	836	883	926	865	882
" 1918 ..	988	950	931	988	1,035	945	972
" 1919 ..	1,059	1,016	968	1,035	1,120	1,006	1,030
" 1920 ..	1,209	1,181	1,139	1,200	1,262	1,124	1,194
TOTAL HOUSEHOLD EXPENDITURE.							
Nov. 1914 ..	712	671	611	699	707	687	687
" 1915 ..	816	768	721	780	755	776	782
" 1916 ..	836	773	698	798	800	783	795
" 1917 ..	892	823	773	832	832	879	847
" 1918 ..	938	890	848	887	885	923	905
" 1919 ..	1,065	988	981	1,018	1,005	1,042	1,022
" 1920 ..	1,193	1,172	1,054	1,164	1,111	1,213	1,166

(a) Weighted Average.

5. **Relative Household Expenditure.**—The following table shows for the towns covered by this Series of index-numbers the relative cost of each of the groups of household expenditure :—

ALL ITEMS OF HOUSEHOLD EXPENDITURE. ("C" SERIES INDEX). RELATIVE COST OF EACH GROUP OF ITEMS.

(Base : Weighted Average Cost of All Groups in each Town = 1,000.)

State and Town.	1935.					1930.				
	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.
NEW SOUTH WALES—										
Sydney	381	222	201	196	1,000	366	238	202	194	1,000
Newcastle	389	208	218	185	1,000	376	223	213	188	1,000
Broken Hill	441	167	192	200	1,000	417	172	199	212	1,000
Goulburn	369	212	247	172	1,000	393	226	229	182	1,000
Bathurst	392	202	224	182	1,000	370	217	220	187	1,000
Weighted Average 5										
Towns	383	219	203	195	1,000	366	236	204	194	1,000
VICTORIA—										
Melbourne	368	220	222	190	1,000	358	231	211	200	1,000
Ballarat	391	177	245	187	1,000	379	184	230	207	1,000
Bendigo	382	178	249	191	1,000	374	190	224	212	1,000
Geelong	374	210	235	181	1,000	355	225	223	198	1,000
Warrnambool ..	372	211	247	170	1,000	366	219	228	193	1,000
Weighted Average 5										
Towns	369	216	225	190	1,000	358	229	212	201	1,000
QUEENSLAND—										
Brisbane	378	195	228	198	1,000	367	211	218	204	1,000
Toowoomba	361	203	239	197	1,000	354	221	218	207	1,000
Rockhampton ..	399	164	245	192	1,000	394	168	234	204	1,000
Charters Towers	416	143	222	210	1,000	406	140	220	234	1,000
Warwick	380	178	237	205	1,000	375	177	221	227	1,000
Weighted Average 5										
Towns	379	192	231	198	1,000	370	207	219	204	1,000
SOUTH AUSTRALIA—										
Adelaide	368	191	239	202	1,000	355	210	224	211	1,000
Kadina, etc. ..	435	110	245	210	1,000	426	110	237	227	1,000
Port Pirie	398	160	231	199	1,000	396	172	220	206	1,000
Mount Gambier ..	371	164	207	198	1,000	367	176	246	211	1,000
Peterborough ..	377	169	250	198	1,000	371	190	228	211	1,000
Weighted Average 5										
Towns	371	187	240	202	1,000	359	205	225	211	1,000
WESTERN AUSTRALIA—										
Perth, etc.	380	203	228	189	1,000	371	220	215	194	1,000
Kalgoorlie, etc. ..	374	221	241	164	1,000	393	254	211	172	1,000
Northam	398	197	215	190	1,000	390	205	210	195	1,000
Bunbury	379	190	243	179	1,000	367	224	225	184	1,000
Geraldton	369	226	218	187	1,000	393	240	200	191	1,000
Weighted Average 5										
Towns	380	204	228	188	1,000	371	223	215	191	1,000
TASMANIA—										
Hobart	360	223	215	172	1,000	357	235	224	184	1,000
Launceston	360	190	259	170	1,000	358	214	235	193	1,000
Burnie	406	187	237	170	1,000	388	204	225	183	1,000
Devonport	391	195	237	177	1,000	383	199	229	189	1,000
Queenstown	400	178	260	162	1,000	394	198	232	176	1,000
Weighted Average 5										
Towns	366	212	250	172	1,000	361	225	228	186	1,000
Weighted Average for 30										
Towns	377	212	218	193	1,000	364	216	212	198	1,000
Weighted Average 6										
Capital Cities ..	374	214	218	194	1,000	363	229	200	199	1,000
TOWNSVILLE (Q.) (a)	393	196	229	182	1,000	382	209	214	195	1,000
PORT AUGUSTA (S.A.) (a)	414	159	230	197	1,000	408	165	222	205	1,000

(a) Not included in above weighted averages.

§ 4. Retail Price Index-Numbers, 200 Towns.

1. *General.*—To supplement the information collected each month for the 30 towns a special investigation was initiated in November, 1913, into retail price index-numbers in 70 additional towns. This investigation was repeated in November, 1914, and again in November, 1915, when the number of additional towns was increased to 120. In November, 1923, the number of additional towns was further increased to 170, and it is intended to institute inquiries in November of each year, thus making information available annually for 200 towns. The results of the first investigation were published in Labour Bulletin No. 5, pp. 26 to 33, where a description was given of the methods adopted in making the investigation and in computing the index-numbers. The results of the succeeding yearly investigations appear in the Labour Bulletins and Reports of this Bureau.

2. *Detailed Results, 1934 to 1936.*—The base of the index-numbers in the table is the cost of food and housing (all houses) in the six capitals in 1911. This is to some extent arbitrary, inasmuch as the standard of housing in the base itself differs from that used in the index-numbers, but the latter are comparable throughout.

Column A shows the relative cost of food in the various towns; Column B the relative cost of food and rent of four-roomed houses; and Column C the relative cost of food and rent of five-roomed houses. The difference between Columns B and A, and C and A, represents in each case the relative rents of four-roomed and five-roomed houses for each town. In comparing rents for various towns, therefore, these differences must first be ascertained in order to make the necessary allowance for the differences due to food as between towns.

RETAIL PRICE INDEX-NUMBERS.—COST OF FOOD AND GROCERIES, AND OF FOOD, GROCERIES AND HOUSING IN 200 TOWNS.

(Base: Weighted Average cost of Food, Groceries, and Rent of All Houses in Six Capital Cities, 1911 = 1,000.)

State and Town.	1934. November.			1935. November.			1936. November.		
	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.
	A	B	C	A	B	C	A	B	C
NEW SOUTH WALES—									
Albury	836	1,280	1,364	846	1,311	1,406	902	1,379	1,485
Armidale	817	1,109	1,247	865	1,220	1,273	854	1,212	1,304
Ballina	846	1,175	1,280	855	1,223	1,315	868	1,250	1,374
Bathurst	852	1,217	1,270	887	1,229	1,310	882	1,277	1,342
Bega	866	1,217	1,281	896	1,258	1,320	909	1,303	1,435
Berry	906	1,222	1,301	920	1,315	1,407	919	1,311	1,400
Blackheath	896	1,265	1,295	929	1,310	1,335	968	1,353	1,444
Bourke	892	1,221	1,352	930	1,249	1,328	949	1,343	1,468
Bowral	876	1,229	1,337	893	1,258	1,392	907	1,275	1,468
Broken Hill	973	1,343	1,418	978	1,311	1,418	1,028	1,352	1,505

INDEX-NUMBERS.—COST OF FOOD, GROCERIES AND HOUSING IN 200 TOWNS, ETC.—*continued.*

State and Town.	1934. November.			1935. November.			1936. November.		
	Food and Groceries only.	Food, Groceries, and Rent of Roomed Houses.	Food, Groceries and Rent of Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of Roomed Houses.	Food, Groceries, and Rent of Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of Roomed Houses.	Food, Groceries, and Rent of Roomed Houses.
NEW SOUTH WALES <i>con-</i>	A	B	C	A	B	C	A	B	
<i>tinued.</i>									
Casino	832	1,240	1,359	900	1,352	1,471	948	1,457	
Cessnock	834	1,103	1,140	890	1,171	1,256	894	1,215	
Colar	1,028	1,217	1,278	1,066	1,307	1,329	1,086	1,358	
Cooma	881	1,204	1,342	943	1,292	1,436	926	1,259	
Coonamble	927	1,254	1,328	966	1,313	1,401	1,012	1,352	
Cootamundra	831	1,246	1,366	868	1,301	1,419	895	1,308	
Corrimal	861	1,253	1,321	878	1,270	1,339	922	1,306	
Cowra	851	1,313	1,408	889	1,344	1,448	905	1,361	
Cronulla	877	1,286	1,418	905	1,350	1,456	922	1,382	
Darling	910	1,256	1,401	930	1,262	1,433	955	1,310	
Dubbo	812	1,311	1,372	837	1,302	1,468	803	1,353	
Forbes	866	1,289	1,494	930	1,375	1,576	908	1,342	
Gilgandra	861	1,220	1,253	919	1,325	1,397	910	1,357	
Glen Innes	807	1,162	1,288	850	1,230	1,366	857	1,205	
Goulburn	868	1,306	1,345	891	1,351	1,377	900	1,353	
Grafton	823	1,281	1,440	867	1,302	1,553	800	1,420	
Grenfell	849	1,243	1,411	874	1,350	1,471	882	1,382	
Griffith	956	1,607	1,884	961	1,715	1,816	990	1,705	
Gulgong	823	1,100	1,152	865	1,191	1,266	900	1,236	
Gunnedah	816	1,177	1,343	873	1,234	1,410	887	1,336	
Hay	945	1,293	1,460	951	1,334	1,524	980	1,400	
Inverell	851	1,306	1,382	893	1,383	1,501	844	1,305	
Junee	861	1,371	1,499	872	1,382	1,510	922	1,308	
Katoomba	877	1,421	1,525	913	1,462	1,566	932	1,478	
Kempsey	853	1,238	1,357	845	1,253	1,342	854	1,257	
Kiama	935	1,225	1,421	935	1,231	1,461	952	1,281	
Kurri Kurri	861	1,107	1,192	851	1,114	1,180	884	1,147	
Leeton	893	1,480	1,620	933	1,591	1,722	941	1,590	
Lismore	823	1,300	1,455	878	1,411	1,531	933	1,458	
Lithgow	899	1,216	1,224	904	1,178	1,218	852	1,127	
Maitland	830	1,128	1,193	877	1,101	1,257	876	1,223	
Moree	925	1,476	1,579	933	1,504	1,621	952	1,546	
Moss Vale	856	1,246	1,330	889	1,325	1,418	894	1,347	
Mudgee	814	1,273	1,339	863	1,356	1,396	884	1,346	
Narrabri	885	1,321	1,394	924	1,368	1,409	942	1,426	
Narrandera	893	1,406	1,490	909	1,446	1,541	946	1,535	
Newcastle	894	1,284	1,397	927	1,356	1,467	915	1,344	
Nowra	885	1,319	1,420	949	1,431	1,545	947	1,467	
Orange	814	1,219	1,361	861	1,283	1,403	856	1,209	
Parkes	847	1,220	1,350	888	1,227	1,373	905	1,307	
Penrith	829	1,132	1,209	849	1,204	1,277	862	1,220	
Port Kembla	901	1,276	1,374	912	1,356	1,412	956	1,426	
Portland	885	1,148	1,214	908	1,171	1,237	903	1,133	
Queanbeyan	895	1,205	1,275	931	1,269	1,387	953	1,303	
Quirindi	900	1,242	1,351	910	1,253	1,358	912	1,259	
Richmond	884	1,298	1,344	870	1,298	1,363	860	1,353	
Scone	852	1,293	1,380	881	1,302	1,414	906	1,347	
Singleton	821	1,174	1,224	870	1,275	1,294	856	1,244	
Sydney	880	1,316	1,413	896	1,340	1,444	909	1,365	
Tamworth	820	1,188	1,303	849	1,296	1,390	848	1,408	
Taree	827	1,296	1,432	893	1,397	1,507	909	1,418	
Temora	845	1,328	1,416	846	1,394	1,480	867	1,514	
Teuterville	813	1,177	1,237	875	1,282	1,334	911	1,328	
Tumut	853	1,324	1,422	876	1,348	1,457	882	1,365	
Umarra	872	1,267	1,398	897	1,292	1,423	939	1,334	

INDEX-NUMBERS.—COST OF FOOD, GROCERIES AND HOUSING IN 200 TOWNS, ETC.—*continued.*

State and Town.	1934. November.			1935. November.			1936. November.		
	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.	Food and Groceries only.	Food, Groceries, and Rent of 4-Roomed Houses.	Food, Groceries, and Rent of 5-Roomed Houses.
NEW SOUTH WALES—<i>continued.</i>	A	B	C	A	B	C	A	B	C
Wagga Wagga	832	1,342	1,500	880	1,401	1,557	878	1,411	1,57
Walcha	880	1,238	1,204	976	1,344	1,423	890	1,265	1,311
Wellington	875	1,237	1,283	861	1,225	1,297	872	1,234	1,300
Weston	834	1,126	1,179	861	1,153	1,205	879	1,177	1,223
Windsor	830	1,274	1,356	895	1,372	1,421	896	1,390	1,450
Wollongong	850	1,307	1,419	873	1,354	1,430	898	1,462	1,656
Wyalong	858	1,187	1,253	907	1,236	1,302	916	1,245	1,311
Yass	856	1,250	1,292	895	1,323	1,390	881	1,421	1,507
Young	898	1,310	1,367	900	1,317	1,378	888	1,348	1,447
Weighted Average for State (74 Towns)	878	1,303	1,401	898	1,334	1,437	909	1,359	1,469
VICTORIA—									
Ararat	872	1,202	1,333	901	1,247	1,361	966	1,302	1,460
Bacchus Marsh	830	1,175	1,247	863	1,206	1,265	906	1,233	1,325
Bairnsdale	891	1,161	1,339	908	1,237	1,369	926	1,270	1,416
Ballarat	818	1,129	1,264	861	1,173	1,316	919	1,264	1,398
Beechworth	856	1,152	1,191	872	1,168	1,234	932	1,228	1,300
Benalla	874	1,200	1,384	895	1,232	1,431	927	1,273	1,461
Bendigo	836	1,154	1,274	855	1,202	1,373	902	1,280	1,349
Camperdown	857	1,236	1,382	894	1,258	1,418	908	1,268	1,419
Casterton	879	1,261	1,340	890	1,272	1,351	935	1,330	1,409
Castlemaine	816	1,104	1,198	872	1,208	1,289	890	1,219	1,326
Colac	856	1,274	1,371	861	1,206	1,407	887	1,343	1,471
Creswick	831	989	1,041	882	1,040	1,093	904	1,036	1,088
Daylesford	831	1,041	1,118	856	1,067	1,144	888	1,125	1,190
Dunolly	836	1,047	1,083	880	1,087	1,117	936	1,160	1,232
Echuca	826	1,135	1,283	868	1,184	1,316	890	1,217	1,382
Euroa	846	1,142	1,251	890	1,219	1,324	921	1,260	1,394
Geelong	798	1,172	1,332	838	1,237	1,430	877	1,297	1,480
Hamilton	847	1,218	1,304	900	1,272	1,368	900	1,335	1,463
Healesville	861	1,124	1,210	875	1,151	1,236	939	1,207	1,334
Horsham	843	1,231	1,301	919	1,380	1,446	975	1,502	1,609
Kerang	862	1,250	1,298	915	1,303	1,343	942	1,324	1,419
Koroit	838	1,114	1,167	872	1,135	1,201	880	1,144	1,218
Korumburra	823	1,142	1,274	824	1,170	1,318	870	1,224	1,340
Kyneton	797	1,088	1,227	827	1,131	1,248	896	1,186	1,357
Lilydale	858	1,180	1,252	890	1,219	1,284	931	1,300	1,342
Maffra	826	1,150	1,247	869	1,198	1,296	949	1,278	1,410
Maldon	871	1,003	1,068	893	1,054	1,114	922	1,100	1,168
Maryborough	826	1,087	1,206	855	1,122	1,230	935	1,223	1,375
Melbourne	798	1,207	1,340	839	1,268	1,398	877	1,341	1,495
Mildura	917	1,483	1,650	950	1,550	1,714	988	1,576	1,739
Morwell	865	1,287	1,379	887	1,308	1,400	904	1,301	1,383
Nhill	898	1,214	1,326	962	1,291	1,405	1,007	1,312	1,460
Orbost	857	1,149	1,305	916	1,245	1,376	960	1,261	1,397
Portland	847	1,136	1,209	908	1,213	1,280	900	1,219	1,370
Port Fairy	824	1,127	1,252	863	1,163	1,258	908	1,263	1,397
St. Arnaud	897	1,223	1,348	921	1,290	1,398	980	1,380	1,499
Sale	826	1,217	1,302	871	1,273	1,379	942	1,331	1,492
Seymour	893	1,216	1,324	926	1,249	1,357	949	1,333	1,451
Shepparton	847	1,238	1,390	863	1,313	1,432	910	1,382	1,511
Stawell	907	1,157	1,270	959	1,252	1,348	999	1,310	1,436

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State and Town.	1934. November.			1935. November.			1936. November.		
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Victoria—continued.	A	B	C	A	B	C	A	B	C
Swan Hill	877	1,387	1,568	922	1,444	1,644	927	1,464	1,669
Terang	863	1,278	1,363	921	1,290	1,428	927	1,272	1,418
Traralgon	826	1,187	1,246	859	1,247	1,367	870	1,268	1,387
Wangaratta	828	1,293	1,401	871	1,387	1,482	920	1,414	1,529
Warracknabeal	830	1,157	1,258	871	1,260	1,383	920	1,260	1,383
Warragul	831	1,232	1,397	826	1,336	1,502	871	1,381	1,557
Warrnambool	799	1,334	1,561	871	1,274	1,488	870	1,318	1,529
Wonthaggi	836	1,165	1,262	847	1,217	1,344	870	1,210	1,341
Weighted Average for State (48 Towns)	865	1,203	1,334	849	1,261	1,391	872	1,331	1,486
QUEENSLAND—									
Ayr	862	1,314	1,440	877	1,321	1,474	889	1,328	1,472
Barcaldine	920	1,303	1,327	887	1,382	1,487	912	1,372	1,474
Bowen	935	1,284	1,303	932	1,287	1,377	930	1,280	1,360
Brisbane	768	1,312	1,400	822	1,278	1,378	873	1,272	1,371
Bundaberg	793	1,052	1,118	845	1,122	1,188	870	1,127	1,173
Cairns	881	1,424	1,508	931	1,387	1,493	963	1,384	1,478
Charleville	628	1,330	1,511	1,000	1,378	1,614	912	1,371	1,611
Charters Towers	845	1,080	1,176	923	1,180	1,288	927	1,160	1,222
Chillagoe	961	1,150	1,211	962	1,148	1,212	973	1,171	1,220
Cloncurry	970	1,348	1,461	1,085	1,279	1,388	1,081	1,382	1,509
Cooktown	968	1,113	1,166	1,015	1,159	1,212	968	1,209	1,262
Cunnamulla	941	1,337	1,438	977	1,372	1,483	988	1,418	1,527
Dalby	800	1,100	1,201	850	1,284	1,394	919	1,331	1,480
Gayndah	834	1,110	1,215	860	1,212	1,317	928	1,232	1,337
Gladstone	812	1,153	1,266	871	1,227	1,336	917	1,233	1,342
Goondiwindi	864	1,200	1,300	930	1,381	1,463	992	1,387	1,489
Gympie	811	1,130	1,208	903	1,223	1,388	894	1,210	1,361
Hughenden	938	1,340	1,431	968	1,378	1,461	980	1,392	1,480
Innisfail	955	1,191	1,024	973	1,532	1,674	1,008	1,300	1,417
Ipswich	783	1,002	1,120	820	1,091	1,207	873	1,113	1,238
Longreach	970	1,311	1,452	1,030	1,378	1,527	1,073	1,370	1,525
Mackay	880	1,267	1,410	918	1,377	1,584	960	1,428	1,631
Maryborough	761	1,090	1,208	850	1,168	1,273	872	1,217	1,322
Mount Morgan	878	1,081	1,092	900	1,088	1,098	930	1,192	1,238
Nambour	808	1,008	1,177	878	1,177	1,261	881	1,171	1,269
Rockhampton	808	1,113	1,168	883	1,168	1,245	910	1,223	1,271
Roma	800	1,110	1,208	934	1,226	1,302	937	1,217	1,308
Stanthorpe	810	1,152	1,237	815	1,201	1,247	860	1,170	1,268
Towoomba	732	1,111	1,160	791	1,100	1,183	813	1,280	1,315
Townsville	800	1,257	1,364	931	1,333	1,430	982	1,303	1,478
Warwick	750	1,057	1,171	834	1,134	1,246	864	1,162	1,222
Winton	608	1,244	1,395	981	1,270	1,402	1,002	1,350	1,502
Weighted Average for State (32 Towns)	787	1,127	1,214	849	1,201	1,300	886	1,264	1,364
SOUTH AUSTRALIA—									
Adelaide	815	1,150	1,200	826	1,193	1,313	847	1,242	1,371
Freeling	800	1,072	1,138	847	1,170	1,176	867	1,130	1,196
Gawler	818	1,073	1,182	813	1,095	1,181	858	1,107	1,247
Kadina, etc.	801	1,076	1,150	914	1,097	1,184	938	1,108	1,204
Kapunda	803	981	1,070	835	1,046	1,116	855	1,066	1,138

INDEX-NUMBERS.—COST OF FOOD, GROCERIES AND HOUSING IN 200 TOWNS, ETC.—continued.

State and Town.	1934. November.			1935. November.			1936. November.		
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SOUTH AUSTRALIA—continued.	A	B	C	A	B	C	A	B	C
Koorinna	832	1,128	1,244	914	1,221	1,348	926	1,228	1,375
Millicent	849	1,162	1,244	847	1,187	1,264	864	1,207	1,279
Mount Gambler ..	791	1,065	1,204	845	1,142	1,252	858	1,155	1,268
Murray Bridge ..	771	1,004	1,123	803	1,035	1,137	817	1,076	1,193
Peterborough ..	848	1,212	1,289	860	1,225	1,302	896	1,258	1,359
Port Augusta ..	910	1,202	1,326	939	1,234	1,359	975	1,270	1,405
Port Pirie	856	1,162	1,275	854	1,166	1,270	944	1,265	1,370
Quorn	844	1,160	1,229	893	1,222	1,275	886	1,180	1,314
Renmark	956	1,334	1,396	969	1,373	1,447	968	1,402	1,490
Victor Harbour ..	833	1,162	1,281	859	1,260	1,346	884	1,299	1,434
Weighted Average for State (15 Towns) ..	820	1,154	1,280	833	1,188	1,305	856	1,236	1,361
WESTERN AUSTRALIA—									
Albany	917	1,238	1,354	930	1,259	1,391	944	1,351	1,444
Beverley	920	1,336	1,413	937	1,354	1,431	967	1,394	1,493
Bridgetown	967	1,278	1,395	980	1,335	1,440	1,006	1,414	1,499
Broome	1,217	1,677	1,875	1,203	1,663	1,861	1,243	1,644	1,703
Bunbury	889	1,294	1,399	890	1,309	1,424	919	1,386	1,475
Carriarvon	1,062	1,491	1,621	1,087	1,500	1,646	1,140	1,633	1,745
Collie	908	1,247	1,329	900	1,285	1,361	949	1,271	1,373
Geraldton	880	1,361	1,497	885	1,368	1,526	1,011	1,521	1,649
Greenbushes	973	1,121	1,190	996	1,128	1,174	1,011	1,143	1,182
Kalgoorlie and Boulder	1,047	1,570	1,659	1,033	1,579	1,702	1,059	1,624	1,801
Katanning	889	1,193	1,305	873	1,202	1,314	931	1,286	1,386
Leonora and Gwalia	1,142	1,405	1,464	1,152	1,481	1,546	1,200	1,520	1,595
Meekatharra	1,103	1,585	1,739	1,146	1,606	1,760	1,204	1,664	1,818
Narrogin	919	1,367	1,521	909	1,403	1,448	959	1,440	1,499
Northam	890	1,295	1,399	895	1,301	1,401	958	1,372	1,451
Perth and Fremantle	856	1,254	1,344	857	1,259	1,353	909	1,332	1,419
Wagin	860	1,145	1,222	901	1,191	1,267	973	1,248	1,326
York	844	1,180	1,233	905	1,240	1,293	893	1,235	1,288
Weighted Average for State (18 Towns) ..	878	1,281	1,374	879	1,289	1,387	929	1,360	1,453
TASMANIA—									
Beaconsfield	843	988	1,054	861	1,058	1,124	886	1,083	1,149
Burnie	864	1,222	1,318	881	1,252	1,339	930	1,314	1,420
Campbelltown	858	1,100	1,154	905	1,156	1,274	925	1,136	1,221
Deloraine	830	1,159	1,185	829	1,158	1,184	837	1,179	1,232
Devonport	879	1,296	1,354	868	1,291	1,355	919	1,342	1,371
Franklin	936	1,173	1,232	943	1,180	1,259	914	1,177	1,216
Hobart	856	1,300	1,435	839	1,288	1,419	920	1,300	1,504
Launceston	827	1,219	1,343	835	1,236	1,343	880	1,299	1,412
New Norfolk	866	1,182	1,234	874	1,242	1,295	958	1,326	1,379
Queenstown	961	1,356	1,415	948	1,347	1,415	969	1,388	1,400
Scottsdale	811	1,047	1,159	822	1,070	1,193	858	1,121	1,265
Ulverstone	858	1,126	1,220	856	1,163	1,231	935	1,264	1,303
Zeehan	1,017	1,414	1,247	993	1,190	1,223	1,033	1,230	1,263
Weighted Average for State (13 Towns) ..	855	1,261	1,379	848	1,262	1,373	913	1,342	1,443
Federal Capital Territory(a)									
Canberra	964	1,530	1,638	980	1,574	1,656	999	1,582	1,667
Weighted Averages—									
Australia (200 Towns) ..	840	1,236	1,345	868	1,279	1,390	896	1,335	1,441
Thirty Towns	837	1,239	1,349	863	1,278	1,391	892	1,329	1,442
Six Capitals	834	1,241	1,352	860	1,280	1,393	888	1,332	1,445

(a) Not in Weighted Averages.

By deducting the index-number in column A from those in column B or C, the relative aggregate cost of housing accommodation can be ascertained. Thus for November, 1936, the index-number for food and groceries in Albany (column A) is 944. Subtracting this from 1,351 (column B) gives a difference of 407, which is the relative cost of house rent for houses of 4 rooms, and from 1,444 (column C) gives a difference of 500, which is the relative cost of housing for houses of 5 rooms. Similarly the relative cost of housing accommodation can be ascertained for each of the towns.

B.—WAGES.

§ 1. Operations under Wages Board and Industrial Arbitration Acts.

1. General.—Particulars regarding operations under the Commonwealth and State Acts for the regulation of wages, hours and conditions of labour were first compiled for the year 1913, and reviews to the end of each annual period appear in the Labour Reports and in the Quarterly Summaries of Australian Statistics.

2. Awards, Determinations, Industrial Agreements.—The following table gives a summary for each of the years 1932 to 1936 :—

AWARDS AND DETERMINATIONS MADE AND INDUSTRIAL AGREEMENTS FILED.

State.	1932.		1933.		1934.		1935.		1936.	
	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.	Awards or Determinations made.	Agreements Filed.
New South Wales	38	25	30	24	55	22	44	31	52	39
Victoria	103	..	138	..	90	..	101	..	141	..
Queensland	21	4	55	21	32	25	46	22	61	3
South Australia	18	8	16	1	19	3	69	0	22	17
Western Australia	5	4	10	9	12	11	17	24	24	26
Tasmania	11	3	9	3	7	1	18	..	22	..
Commonwealth Court	21	9	8	6	24	4	69	13	32	13
Commonwealth Public Service Arbitrator	1	..	1	..	..	..	4	..	2	..
Total	218	53	267	64	239	66	368	90	356	132

3. Boards Authorized, Awards, etc., in Force.—(a) *Totals for Australia.* The following table gives particulars at the dates specified for all States of Boards authorized, and including operations under the Commonwealth and State Arbitration Acts, of the number of awards, determinations and industrial agreements in force :—

BOARDS AUTHORIZED, AWARDS, ETC.—AUSTRALIA.

Dates.	Boards Authorized.	Boards which have made Awards or Determinations.	Awards or Determinations in Force.(a)	Industrial Agreements in Force.
31st December, 1913	505	387(b)	575(c)	401
31st December, 1920	475	440	1,041	972
31st December, 1925	573	520	1,181	607
31st December, 1930	642	580	1,285	601
31st December, 1933	655	581	1,363	653
31st December, 1934	655	581	1,403	689
31st December, 1935	660	583	1,435	709
31st December, 1936	661	583	1,452	767

(a) Including awards made by Arbitration Courts and the Commonwealth Public Service Arbitrator.
 (b) Owing to the fact that a number of awards under the New South Wales Industrial Disputes Act (1908) were still in force, the Boards constituted for such industries under the Industrial Arbitration Act (1912) had not made any awards.
 (c) Excluding awards or determinations which expired in New South Wales (under the Act of 1908) on 31st December, 1913.

Considerable expansion of the principle of the fixation of a legal minimum rate of wage and of working conditions took place during the period under review. At the end of 1936, the number of awards or determinations and industrial agreements* in force had increased by 877 and 366 respectively over the number in force at the 31st December, 1913.

(ii) *Summary for States.* The following table gives particulars for each State and the Commonwealth of the number of Boards authorized, etc., for the years specified:—

BOARDS AUTHORIZED, AWARDS, ETC.—SUMMARY, 1913 AND 1936.

Particulars.	At 31st Dec.	Commonwealth.								
		Court.	Pub. Ser. Arb.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
<i>Industrial and Wages—</i>										
Boards authorized ..	{ 1913 .. 1936 ..	..	..	216 (a) 319	135 189	75 ..	56 76	.. 19	23 57	505 660
Boards which have made Determinations ..	{ 1913 .. 1936 ..	..	..	123 279	123 167	74 ..	47 65	.. 17	19 55	386 583
<i>Awards and Determinations—</i>										
In force ..	{ 1913 .. 1936 166	17 166	.. 45	265 480	127 175	73 296	54 79	18 153	21 58	575 1,452
<i>Industrial Agreements—</i>										
In force ..	{ 1913 .. 1936 156	228 156	..	75 170	..	5 223	11 34	82 174	.. 10	401 707
<i>Commonwealth Awards—</i>										
Number in force in each State ..	{ 1913 .. 1936 ..	..	..	13 113	17 120	15 37	16 92	9 38	13 71	..
<i>Commonwealth Agreements—</i>										
Number in force in each State ..	{ 1913 .. 1936 ..	..	..	132 39	129 71	68 22	62 27	57 17	61 42	..
<i>Commonwealth Public Service Arbitrator—</i>										
Number of Determinations in force in each State ..	1936 ..	..	..	40	37	31	33	30	30	..

(a) Under Industrial Arbitration Act (1926), Conciliation Committees have been appointed, and at the end of 1936, 294 Committees were in force.

§ 2. Rates of Wage and Hours of Labour.

1 General.—The collection of information respecting the current rates of wage payable in different callings and in occupations in various industries was first undertaken by the Bureau in the early part of the year 1913. The particulars are obtained primarily from awards, determinations and agreements under Commonwealth and State Industrial Acts, and therefore are the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken. In cases where no award, determination, or agreement is in force, particulars are taken of the ruling union or predominant rate. During recent years the number of predominant rates of wage included in the tabulations has been reduced considerably, since most of the industries and occupations are now covered by awards, determinations, or industrial agreements.

The index-numbers for male adult workers are computed with the weighted average wage in 1911 as base (= 1,000), in order that comparisons might more readily be made between these index-numbers and the retail price index-numbers (food, groceries and housing—all houses) which are also computed to the year 1911 as base. In the case of females, however, it has not been possible to secure information for years prior to 1914, and the index-numbers are therefore computed with the weighted average rate of wage payable to adult female workers in Australia at 30th April, 1914, as base (= 1,000).

* The registration of industrial agreements is not provided for under the Victorian Act, but such agreements may be registered and filed under the provisions of the Commonwealth Conciliation and Arbitration Act, and are operative within the State.

An extensive tabular presentation of the minimum rates of wage for adult male and female workers in the main occupations in the capital city of each State is given each year in the Appendix to the Labour Report.

2. *Weekly Rates of Wage, 1932 to 1936.*—(i) *General.* The arithmetical average of the rates of wage given in the Appendix referred to is taken for each industrial group. These averages are weighted in accordance with census results to give the average of all occupations for the States and for Australia.

(ii) *Adult Males—States.* The following table gives the weighted average nominal weekly rates of wage payable to adult male workers at the dates specified:—

WAGE RATES OF ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia. (a)
No. of Occupations included ..	874	909	627	567	489	482	3,948

RATES OF WAGE. (b)

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1932 ..	84 11	77 10	88 5	72 7	81 9	78 1	81 10
31st December, 1933 ..	81 11	77 0	88 1	73 5	81 4	78 0	80 6
31st December, 1934 ..	83 2	78 8	88 9	75 6	84 1	79 7	82 0
31st December, 1935 ..	84 2	79 9	88 5	77 11	84 2	81 0	82 10
31st March, 1936 ..	84 2	79 11	88 5	77 11	85 5	81 10	83 0
30th June, 1936 ..	84 5	80 5	88 6	78 0	85 5	81 11	83 4
30th September, 1936 ..	84 11	81 2	88 7	78 9	80 9	83 1	83 11
31st December, 1936 ..	85 5	83 1	88 7	79 6	88 6	83 3	84 10

INDEX-NUMBERS.

(Base: Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st December, 1932 ..	1,657	1,518	1,726	1,416	1,595	1,523	1,597
31st December, 1933 ..	1,598	1,502	1,718	1,433	1,587	1,522	1,570
31st December, 1934 ..	1,623	1,534	1,732	1,473	1,640	1,552	1,599
31st December, 1935 ..	1,642	1,555	1,725	1,520	1,642	1,581	1,617
31st March, 1936 ..	1,642	1,560	1,725	1,520	1,667	1,597	1,620
30th June, 1936 ..	1,648	1,568	1,728	1,522	1,667	1,598	1,625
30th September, 1936 ..	1,656	1,584	1,728	1,530	1,693	1,622	1,637
31st December, 1936 ..	1,668	1,621	1,729	1,552	1,726	1,625	1,656

(a) Weighted average.

(b) Calculated to nearest rd.

Wages declined in all States during the three years 1931 to 1933, the average rates at the 31st December of the latter year being approximately 17 per cent. less than those ruling at the end of 1930. Varying increases were granted in each of the States during the next three years, and as a result the weighted average nominal rate for Australia increased by 4s. 4d. per week. At the 31st December, 1936, rates were highest in Queensland, followed in the order named by Western Australia, New South Wales, Tasmania, Victoria and South Australia. The highest weighted average rate for Australia was recorded during the quarter ended September, 1929, viz., 101s. 5d. per week.

(iii) *Adult Males—Industrial Groups.* The following table shows the average weekly rates of wage and index-numbers in each industrial group, and for all groups at the dates specified.

WAGE RATES OF ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

NOTE.—Index-numbers for each industrial group and for all industrial groups, based on the average wage for all groups in 1911 (51s. 3d.) as base (= 1,000). The index-numbers in this table are comparable throughout :—

Industrial Group.		1st Dec., 1932.	1st Dec., 1933.	1st Dec., 1934.	1st Dec., 1935.	1st March, 1936.	30th June, 1936.	30th Sept., 1936.	1st Dec., 1936.
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
I. Wood, Furniture, etc.	Wage ..	83/4	82/8	85/4	86/8	87/0	87/3	87/2	88/3
	Index-No.	1,627	1,613	1,664	1,691	1,697	1,703	1,700	1,722
II. Engineering, etc.	Wage ..	81/6	81/4	83/2	85/3	85/4	85/5	85/6	86/10
	Index-No.	1,589	1,587	1,593	1,603	1,607	1,607	1,607	1,614
III. Food, Drink, etc.	Wage ..	84/2	83/3	85/3	85/3	85/6	85/8	85/11	87/3
	Index-No.	1,642	1,625	1,633	1,641	1,647	1,651	1,657	1,670
IV. Clothing, Boots, etc.	Wage ..	77/3	76/7	79/11	80/9	80/10	80/11	80/11	81/4
	Index-No.	1,507	1,494	1,559	1,576	1,577	1,579	1,579	1,587
V. Books, Printing, etc.	Wage ..	98/3	97/6	99/6	100/11	100/11	100/11	103/1	104/4
	Index-No.	1,918	1,902	1,942	1,969	1,969	1,970	2,011	2,035
VI. Other Manu- facturing	Wage ..	80/7	79/5	81/4	83/0	83/2	83/6	83/9	84/2
	Index-No.	1,572	1,549	1,587	1,619	1,623	1,629	1,633	1,661
VII. Building	Wage ..	93/11	92/3	93/8	94/2	94/2	94/7	94/0	95/7
	Index-No.	1,833	1,800	1,828	1,836	1,838	1,846	1,844	1,860
VIII. Mining, etc.	Wage ..	98/2	97/0	97/7	97/10	99/1	99/1	99/2	99/2
	Index-No.	1,946	1,893	1,904	1,908	1,938	1,938	1,935	1,935
IX. Railways, etc.	Wage ..	80/11	80/4	82/8	84/0	84/2	84/8	84/10	86/0
	Index-No.	1,579	1,567	1,573	1,582	1,586	1,586	1,586	1,577
X. Other Land Transport	Wage ..	78/3	76/9	78/9	80/1	80/3	80/5	80/9	81/8
	Index-No.	1,527	1,497	1,537	1,562	1,565	1,569	1,575	1,593
XI. Shipping, etc.(a)	Wage ..	79/6	80/9	84/8	85/2	85/2	85/2	84/2	86/8
	Index-No.	1,552	1,575	1,652	1,661	1,661	1,661	1,662	1,690
XII. Agricultural, etc.(b)	Wage ..	74/9	71/11	73/4	73/4	73/6	73/8	75/5	75/9
	Index-No.	1,438	1,404	1,431	1,431	1,433	1,437	1,471	1,478
XIII. Domestic, etc.(b)	Wage ..	76/5	74/10	75/9	76/8	77/1	77/7	78/3	79/1
	Index-No.	1,462	1,460	1,478	1,486	1,486	1,486	1,522	1,513
XIV. Miscellaneous	Wage ..	78/11	77/5	78/7	79/6	79/8	80/0	80/7	82/2
	Index-No.	1,540	1,511	1,532	1,552	1,554	1,562	1,572	1,603
All Industrial Groups (c)		81/10	80/6	82/0	82/10	83/0	83/4	83/11	84/10
		1,597	1,570	1,599	1,617	1,620	1,625	1,637	1,656

(a) Including the value of victualling and accommodation where supplied. (b) Including the value of board and lodging where supplied. (c) Weighted average.

The foregoing table shows that the highest average weekly wage at 31st December, 1936, was recorded in Group V. (Books, Printing, etc.), 104s. 4d. per week, followed by Groups VIII. (Mining), 99s. 2d. per week; VII. (Building), 95s. 7d. per week; I. (Wood Furniture, etc.), 88s. 3d. per week; III. (Food, Drink, etc.), 87s. 3d.; II. (Engineering, etc.), 86s. 10d.; and XI. (Shipping, etc.), 86s. 8d. per week. The lowest average rate was recorded in Group XII. (Agricultural, etc.), 75s. 9d. per week. During the year rates of wage increased in all groups, the greatest increases occurring in the following :— Books, Printing, etc., 3s. 5d. per week; Miscellaneous, 2s. 8d. per week; Agricultural, etc., 2s. 5d. per week; Domestic, etc., 2s. 5d. per week; Other Manufacturing, 2s. 2d. per week; and Food, Drink, etc., 2s. 0d. per week. The increase during the year in the weighted average rate for all groups was 2s. 0d. per week. Compared with the average rates at 31st December, 1929, the highest point recorded for that date in any year, wages at the end of the year 1936 showed a decrease of 16s. 4d. per week.

(iv) *Adult Females—States.* The following table shows the weighted average weekly rates of wage payable to adult female workers for a full week's work in each State and Australia at the dates specified.

WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.(a)
No. of Occupations Included ..	85	87	37	47	24	28	308

RATES OF WAGE. (b)

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1932 ..	44 8	43 0	46 9	40 11	49 7	43 4	44 2
31st December, 1933 ..	43 2	42 9	46 9	41 0	48 4	43 1	43 5
31st December, 1934 ..	44 3	43 9	47 8	41 11	49 1	44 1	44 5
31st December, 1935 ..	44 11	44 2	48 0	42 5	49 1	44 10	45 0
31st March, 1936 ..	44 11	44 9	48 1	43 0	49 2	45 1	45 3
30th June, 1936 ..	45 2	44 9	48 3	43 0	49 2	45 1	45 5
30th September, 1936 ..	45 3	46 5	48 3	43 0	50 0	45 0	46 1
31st December, 1936 ..	45 7	46 10	48 4	43 4	50 11	45 1	46 5

INDEX-NUMBERS.

(Base : Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1932 ..	1,644	1,583	1,720	1,505	1,826	1,595	1,624
31st December, 1933 ..	1,589	1,573	1,720	1,510	1,778	1,587	1,599
31st December, 1934 ..	1,628	1,609	1,755	1,541	1,809	1,623	1,636
31st December, 1935 ..	1,654	1,626	1,767	1,561	1,809	1,651	1,655
31st March, 1936 ..	1,654	1,648	1,771	1,584	1,809	1,660	1,666
30th June, 1936 ..	1,664	1,648	1,776	1,584	1,809	1,660	1,670
30th September, 1936 ..	1,665	1,710	1,776	1,584	1,840	1,656	1,696
31st December, 1936 ..	1,677	1,722	1,780	1,594	1,873	1,661	1,708

(a) Weighted average. (b) Calculated to nearest rd.

Female rates followed the same downward course as male rates from 1931 to 1933. The weekly average nominal wage for Australia fell from 53s. 7d. in 1930 to 43s. 5d. in 1933, a decline of 10s. 2d., or 17 per cent. As with the rates for males increases were recorded in all States during the next three years, and the weighted average rate for Australia advanced by 3s. 0d. per week.

(v) *Adult Females—Industrial Groups.* The following table gives particulars of the weighted average weekly rates of wage payable to adult female workers in the industrial groups in which they are mainly employed, and in all groups combined.

WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

Date.	Industrial Group.					
	III. Food, Drink, etc.	IV. Clothing, Boots, etc.	I., II., V., and VI., All Other Manufacturing.	XIII. Domestic, etc.(a)	XIV. Miscel- laneous.	All Groups. (b)
RATES OF WAGE.						
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1932	41 0	42 4	44 2	46 2	47 0	44 2
31st December, 1933	40 6	41 11	43 5	43 4	45 11	43 5
31st December, 1934	40 8	43 6	44 2	45 11	47 2	44 5
31st December, 1935..	42 1	44 2	44 8	46 3	46 5	45 0
31st March, 1936 ..	42 5	44 3	44 9	46 4	47 5	45 3
30th June, 1936 ..	42 7	44 4	44 10	46 6	47 6	45 5
30th September, 1936	42 8	44 6	45 1	46 7	50 6	46 1
31st December, 1936..	43 1	44 9	45 8	47 1	50 9	46 5

INDEX-NUMBERS.

(Base : Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1932	1,508	1,559	1,625	1,700	1,730	1,624
31st December, 1933	1,491	1,542	1,599	1,594	1,691	1,599
31st December, 1934	1,497	1,601	1,626	1,689	1,737	1,636
31st December, 1935	1,549	1,625	1,645	1,701	1,708	1,655
31st March, 1936 ..	1,562	1,630	1,647	1,706	1,744	1,666
30th June, 1936 ..	1,568	1,632	1,651	1,711	1,750	1,670
30th September, 1936	1,572	1,637	1,661	1,714	1,859	1,696
31st December, 1936..	1,585	1,646	1,680	1,734	1,867	1,708

(a) Including the value of board and lodging, where supplied. (b) Weighted average.

During the year 1936 rates of wage for female employees in all industrial groups showed an increase as compared with those for the previous year, the greatest increases occurring in Group XIV. (Miscellaneous), 4s. 4d. per week : Group III. (Food, Drink, etc.), 1s. 0d. per week and Group I., II., V. and VI. (all other manufacturing) 1s. 0d. per week. The weighted average for all groups increased by 1s. 5d. per week.

3. Relative Hours of Labour and Hourly Rates of Wage, 1932 to 1936.—(i) General. The rates of wage referred to in preceding paragraphs relate to the minimum payable for a full week's work. The number of hours constituting a full week's work differs, however, in many instances between various trades and occupations in each State, and between the same trades and occupations in the several States. In order to secure what may be for some other purposes a more adequate standard of comparison, it is desirable to reduce the comparison to a common basis, viz., the rate of wage per hour. Particulars are given in the following table classified according to States, for male and female occupations separately, at the end of the years 1932 to 1936. These particulars relate to (a) the weighted average nominal weekly wage ; (b) the weighted average number of working hours constituting a full week's work ; and (c) the weighted average hourly wage. The weighted average weekly wage relates to all industrial groups combined, and includes

the value of board and lodging where supplied in land occupations, and the value of victualling in marine occupations, whereas the number of working hours and the hourly wage relate to all industrial groups other than Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Many of the occupations included in these two groups are of a casual or seasonal nature, and the hours of labour in the agricultural and dairying industry are not generally regulated either by awards or determinations of industrial tribunals or otherwise, hence the necessary data for the computation of the average number of working hours are not available.

The general effect of reducing the rates of wage to a common basis (i.e., per hour) is to eliminate on comparison any apparent difference between the several States which may be due to unequal working time.

(ii) *Adult Males and Females.* Particulars of the weekly and hourly wages and hours of labour for adult males and females for the last five years are given in the table hereunder:—

WEEKLY AND HOURLY WAGES AND HOURS OF LABOUR OF ADULT WORKERS.

Date.	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus.
MALE WORKERS.								
31st Dec., 1932	Weekly Wage (a)	.. 84/11	77/10	88/5	72/7	81/9	78/1	81/10
	Working Hours (b)	.. 44.19	46.86	44.99	46.83	45.51	46.75	45.49
	Hourly Wage (b)	.. 1/11½	1/8½	2/0½	1/7	1/10	1/8½	1/10
31st Dec., 1933	Weekly Wage (a)	.. 81/11	77/0	88/1	73/5	81/4	78/0	80/6
	Working Hours (b)	.. 44.23	46.82	44.00	46.83	45.51	46.77	45.36
	Hourly Wage (b)	.. 1/11	1/8	2/0½	1/7½	1/10	1/8½	1/9½
31st Dec., 1934	Weekly Wage (a)	.. 83/2	78/8	88/9	75/6	84/1	79/7	82/0
	Working Hours (b)	.. 44.23	46.82	44.00	46.83	45.51	46.77	45.36
	Hourly Wage (b)	.. 1/11½	1/8½	2/0½	1/7½	1/10½	1/8½	1/10½
31st Dec., 1935	Weekly Wage (a)	.. 84/2	79/9	88/5	77/11	84/2	81/0	82/10
	Working Hours (b)	.. 44.18	46.74	43.03	46.03	45.45	46.75	45.29
	Hourly Wage (b)	.. 1/11½	1/9	2/1	1/8½	1/10½	1/9½	1/10½
31st Dec., 1936	Weekly Wage (a)	.. 85/6	83/1	88/7	79/6	88/6	83/3	84/10
	Working Hours (b)	.. 44.08	46.11	43.11	45.55	45.38	46.33	45.09
	Hourly Wage (b)	.. 2/0½	1/10	2/1	1/9	2/0	1/9½	1/11½

FEMALE WORKERS.

31st Dec., 1932	Weekly Wage	.. 44/8	43/0	46/9	40/11	49/7	43/4	44/2
	Working Hours	.. 43.93	45.44	44.50	46.03	45.57	46.07	44.88
	Hourly Wage	.. 1/0½	0/11½	1/0½	0/10½	1/1	0/11½	0/11½
31st Dec., 1933	Weekly Wage	.. 43/2	42/9	46/9	41/0	48/4	43/2	43/5
	Working Hours	.. 43.93	45.44	44.03	46.03	45.57	46.07	44.81
	Hourly Wage	.. 0/11½	0/11½	1/0½	0/10½	1/0½	0/11½	0/11½
31st Dec., 1934	Weekly Wage	.. 44/3	43/9	47/8	41/11	49/1	44/1	44/5
	Working Hours	.. 43.93	45.44	44.03	46.03	45.57	46.07	44.81
	Hourly Wage	.. 1/0	0/11½	1/1	0/11	1/1	0/11	1/0
31st Dec., 1935	Weekly Wage	.. 44/11	44/2	48/0	42/5	49/1	44/10	45/0
	Working Hours	.. 43.93	45.41	44.03	46.03	45.57	46.07	44.81
	Hourly Wage	.. 1/0½	0/11½	1/1	0/11	1/1	0/11½	1/0
31st Dec., 1936	Weekly Wage	.. 45/7	46/10	48/4	43/4	50/11	45/2	46/5
	Working Hours	.. 43.93	44.94	44.03	46.03	45.57	45.24	44.60
	Hourly Wage	.. 1/0½	1/0½	1/1½	0/11½	1/1½	1/0	1/0½

(a) Weighted average weekly rate in all industrial groups combined. (b) Weighted average working hours per week, and computed hourly rates of wage for all industrial groups excepting Groups XI. (Shipping, etc.), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in industrial groups XI. and XII.

(iii) *Index-Numbers.* The tendency in a majority of the States during the years 1924 to 1928 was towards a slight reduction in hours of labour, particularly in Queensland and New South Wales, where a 44-hour week became operative on 1st July, 1925, and on 4th January, 1926, respectively. Further decreases were recorded in the hours of work per week for male employees during 1927 in all States excepting Queensland, where hours remained stationary. The decline in the other States was due mainly to the reduction of the standard hours of labour in Group II. (Engineering, etc.) from 48 to 44 hours per week, as awarded by the Commonwealth Court of Conciliation and Arbitration. The decline in the weekly hours in New South Wales, Victoria, South Australia and Tasmania in 1928 was due mainly to the reduction of the standard hours of labour in Group V. (Books, Printing, etc.). During 1929 the hours of work per week for timber workers in certain States were increased by the Commonwealth Court, with the result that the weighted average hours for Australia were slightly increased. The repeal of the Acts in New South Wales and Queensland providing for a 44-hour week tended to increase the average number of hours of labour per week in those States during the year 1930, while the restoration of this measure in New South Wales during 1931 and in Queensland during 1933 was mainly responsible for the reduction in hours since 1930. A further slight reduction in Queensland was brought about by the introduction in April, 1935, of a 40-hour week for employees on Building Construction. The effect of these changes on the hourly rate of wage as compared with the general increase in the weekly wage is readily seen from the comparative index-numbers given in the following table:—

WEEKLY AND HOURLY INDEX-NUMBERS OF WAGE RATES. ADULT WORKERS.

(Base: Weighted Average for Australia, 30th April, 1914* = 1,000.)

Date.	Particulars.	N.S.W.	Vic.	Q'land	S.A.	W.A.	Tas.	Australia.
MALE WORKERS.								
31st Dec., 1932	Weekly Wage	1,541	1,411	1,605	1,317	1,483	1,416	1,485
	Hourly Wage (a)	1,701	1,451	1,748	1,355	1,584	1,464	1,584
31st Dec., 1933	Weekly Wage	1,486	1,396	1,598	1,332	1,476	1,415	1,460
	Hourly Wage (a)	1,655	1,438	1,775	1,372	1,571	1,463	1,567
31st Dec., 1934	Weekly Wage	1,509	1,427	1,610	1,369	1,525	1,443	1,487
	Hourly Wage (a)	1,676	1,484	1,782	1,410	1,624	1,494	1,594
31st Dec., 1935	Weekly Wage	1,528	1,448	1,605	1,415	1,528	1,470	1,504
	Hourly Wage (a)	1,703	1,496	1,782	1,476	1,626	1,519	1,617
31st Dec., 1936	Weekly Wage	1,552	1,508	1,609	1,444	1,606	1,512	1,541
	Hourly Wage (a)	1,735	1,537	1,787	1,500	1,724	1,552	1,662

FEMALE WORKERS.

31st Dec., 1932	Weekly Wage	1,644	1,583	1,720	1,505	1,826	1,595	1,624
	Hourly Wage	1,837	1,711	1,863	1,605	1,967	1,700	1,777
31st Dec., 1933	Weekly Wage	1,589	1,573	1,720	1,510	1,778	1,587	1,599
	Hourly Wage	1,776	1,700	1,919	1,611	1,916	1,691	1,752
31st Dec., 1934	Weekly Wage	1,628	1,609	1,755	1,541	1,809	1,623	1,636
	Hourly Wage	1,819	1,738	1,956	1,699	1,947	1,730	1,797
31st Dec., 1935	Weekly Wage	1,654	1,626	1,767	1,561	1,808	1,680	1,655
	Hourly Wage	1,845	1,788	1,971	1,721	1,947	1,789	1,815
31st Dec., 1936	Weekly Wage	1,677	1,722	1,780	1,594	1,873	1,661	1,708
	Hourly Wage	1,875	1,883	1,985	1,730	1,918	1,811	1,881

(a) See footnote to following table.

* Approximate Weekly Rates—M = 55/1; F = 27/2. Hourly Rates—M = 1/2; F = 0 63.

4. **Weighted Average Nominal Weekly Hours of Labour, Adult Males.**—The following table shows the weighted average nominal hours of labour (exclusive of overtime) in a full working week for male workers in each State and Australia at the 31st December, 1932 to 1936.

HOURS OF LABOUR.

INDEX-NUMBERS OF WEEKLY HOURS OF LABOUR OF ADULT MALES.

NOTE.—Index-numbers based on the average hours of labour for Australia at the 30th April, 1914 (48.93) as base (= 1,000). Overtime is excluded.

Date.	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Australia.
31st Dec., 1932	Weighted average weekly hours of labour (a) ..	44.19	46.86	44.09	46.83	45.51	46.75	45.49
	Index-numbers ..	903	958	919	957	930	955	930
31st Dec., 1933	Weighted average weekly hours of labour (a) ..	44.23	46.82	44.00	46.83	45.51	46.77	45.36
	Index-numbers ..	904	957	899	957	930	956	927
31st Dec., 1934	Weighted average weekly hours of labour (a) ..	44.23	46.82	44.00	46.83	45.51	46.77	45.36
	Index-numbers ..	904	957	899	957	930	956	927
31st Dec., 1935	Weighted average weekly hours of labour (a) ..	44.18	46.74	43.60	46.63	45.48	46.75	45.26
	Index-numbers ..	903	955	893	953	929	955	925
31st Dec., 1936	Weighted average weekly hours of labour (a) ..	44.08	46.41	43.60	46.55	45.30	46.33	45.00
	Index-numbers ..	901	948	893	951	926	947	922

(a) Weighted average working hours per week for all industrial groups excepting Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in Industrial Groups XI. and XII.

5. **Nominal and Effective Wages.**—(i) *General.* Wages are said to be nominal when they represent the actual amounts of money received in return for labour, and are described as effective or real when expressed in terms of their equivalent purchasing power, that is, their purchasing power over some definite composite unit or regimen the cost of which can be ascertained at different times. The relation between nominal and effective or real wages was discussed at some length in Labour Report No. 6, and was also referred to in Labour Report No. 11.

Since it is possible to measure purchasing power over more than one composite unit or regimen it is equally possible to convert any given nominal wage series into more than one series of effective or real wages. It has been the practice of the Bureau in the past to compute effective wage index-numbers by dividing the nominal wage index-numbers by the corresponding retail price index-numbers for food, groceries and rent of all houses ("A" series). While wage-rates were generally varied on the basis of the "A" series index-numbers there was a good deal to be said for this procedure. Now that the Commonwealth Court has abandoned the "A" series, the merit of the "C" series of retail price index-numbers for "deflating" nominal wage rates is strengthened. The "C" series covers food, groceries, rent of four and five roomed houses, clothing, and miscellaneous household requirements. In the following tables, therefore, real wages are measured in terms of their purchasing power over both the "A" series regimen and the "C" series regimen. For some purposes the one is appropriate and for some purposes the other.

(ii) *Nominal Weekly Wage Index-numbers 1901 to 1936—States.* The following table shows the course of nominal weekly rates of wage for all industries in each State, the weighted average rate for Australia in 1911 being taken as the base (= 1,000). These results are based generally upon rates of wage prevailing in the capital city of each State,

but in certain industries, such as mining, rates are necessarily taken for places other than the capital cities. For the year 1914 and subsequent years the index-numbers in the following table are based on the average wage for the four quarters of each year:—

NOMINAL WAGE INDEX-NUMBERS, ADULT MALES.

(Base: Weighted Average Wage for Australia, 1911 = 1,000.)

State.	Number of Occupations included.		1901.	1911.	1911.	1921.	1929.	1932.	1933.	1934.	1935.	1936.
	1901	1913										
	to 1911.	to 1935.										
New South Wales	188	874	888	1,003	1,003	1,862	2,012	1,734	1,638	1,617	1,031	1,651
Victoria	150	909	799	985	1,062	1,803	1,964	1,532	1,502	1,523	1,550	1,583
Queensland	87	927	901	997	1,035	1,870	1,976	1,731	1,720	1,727	1,731	1,728
South Australia	131	567	819	1,013	1,001	1,097	1,891	1,134	1,423	1,458	1,093	1,533
Western Australia	69	489	1,052	1,152	1,223	1,832	1,960	1,611	1,384	1,610	1,041	1,688
Tasmania	54	472	719	799	1,027	1,745	1,840	1,533	1,519	1,540	1,571	1,610
Australia (a)	652	3,048	848	1,000	1,081	1,827	1,973	1,639	1,584	1,590	1,609	1,635

(a) Weighted average.

(iii) *Effective or Real Wage Index-numbers in each State, 1901-1936.* In the following tables the index-numbers for the years prior to 1914 are computed from nominal wage index-numbers based on rates current at the end of December, annual averages not being available. For 1914 and following years, however, they are computed from nominal wage index-numbers based on the average of rates current at the end of the four quarters of each year. So far as the years 1901 and 1911 are concerned, however, the index-numbers may be taken as substantially accurate, since the movement in wages during the course of any one year prior to 1914 was comparatively slight.

In obtaining the index-numbers for each State the nominal wage index-numbers for each State have been divided by the corresponding retail price index-numbers for the capital city and multiplied by 1,000.

EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).

Measured in terms of purchasing power over the "A" series regimen.

(Base: Weighted Average Real Wage in Australia in 1911 = 1,000.)

State.	1901.	1911.	1914.	1920.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
New South Wales	..	961	973	906	911	1,050	1,107	1,160	1,150	1,138	1,101	1,095
Victoria	..	915	1,037	961	873	1,084	1,158	1,162	1,126	1,139	1,114	1,092
Queensland	..	1,172	1,090	1,038	1,036	1,220	1,317	1,345	1,376	1,417	1,377	1,323
South Australia	..	948	957	929	853	1,067	1,166	1,178	1,133	1,152	1,144	1,149
Western Australia	..	1,024	1,023	1,070	1,012	1,143	1,229	1,232	1,212	1,246	1,221	1,224
Tasmania	..	827	838	942	830	1,064	1,111	1,104	1,067	1,094	1,080	1,099
Australia (a)	..	964	1,000	948	911	1,082	1,152	1,185	1,168	1,178	1,148	1,133

(a) Weighted average.

Since the "C" series index-numbers were not compiled for periods prior to November, 1914, it has been assumed for the purpose of the following table that fluctuations between 1911, the base of the table, and 1914 in the "C" series would have been similar to the fluctuations observed in the "A" series.

EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).

Measured in terms of purchasing power over the "C" series regimen.

(Base: Weighted Average Real Wage in Australia in 1911 = 1,000.)

State.	1901.	1911.	1914.	1920.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
New South Wales	925	850	1,130	1,164	1,210	1,200	1,180	1,157	1,143
Victoria	951	806	1,164	1,221	1,200	1,150	1,147	1,146	1,131
Queensland	1,022	957	1,290	1,332	1,336	1,366	1,382	1,306	1,338
South Australia	914	776	1,099	1,176	1,137	1,079	1,086	1,091	1,097
Western Australia	1,043	888	1,152	1,206	1,180	1,158	1,177	1,177	1,187
Tasmania	902	758	1,108	1,153	1,120	1,094	1,110	1,109	1,115
Australia (a)	1,000	948	841	1,151	1,198	1,210	1,190	1,187	1,173	1,166

(a) Weighted average.

In the table above, the effective wage index-numbers are computed to the one base, that of Australia for 1911. As the index-numbers are comparable in all respects, comparisons may be made as to the increase or decrease in the effective wage index-number for any State over any period of years.

(iv) *Effective or Real Wage Index-numbers in the Commonwealth, 1901-1936.* In the following table similar index-numbers are given for Australia as a whole. These are obtained by dividing the nominal wage index-numbers for Australia by the corresponding retail price index-numbers for the Six Capital Cities and multiplying by 1,000.

NOMINAL AND EFFECTIVE OR REAL WAGE INDEX NUMBERS FULL WORK.

(Base: Weighted Average Real Wage in Australia in 1911 = 1,000.)

Year.	Nominal Weekly Wage Index- Numbers.	Retail Price Index-numbers.		Effective or Real Wage Index-numbers, i.e., Relative Purchasing Power over Regimen of—	
		“A” Series (Food, Groceries and Rent of All Houses).		“A” Series. “C” Series.	
		“C” Series (All Items).			
1901	848	880	..	964	..
1909	923	948	..	974	..
1910	955	970	..	985	..
1911	1,000	1,000	(1,000)	1,000	(1,000)
1912	1,051	1,101	..	955	..
1913	1,076	1,104	..	975	..
1914	1,081	1,140	1,140	948	948
1915	1,092	1,278	1,297	854	842
1916	1,144	1,324	1,319	864	867
1917	1,226	1,318	1,406	930	872
1918	1,270	1,362	1,501	932	846
1919	1,370	1,510	1,695	907	808
1920	1,627	1,785	1,935	911	841
1921	1,826	1,697	1,680	1,076	1,087
1922	1,801	1,600	1,619	1,126	1,112
1923	1,805	1,700	1,664	1,062	1,085
1924	1,840	1,681	1,637	1,095	1,124
1925	1,861	1,722	1,654	1,081	1,125
1926	1,914	1,786	1,677	1,072	1,141
1927	1,946	1,766	1,662	1,102	1,171
1928	1,903	1,760	1,675	1,115	1,172
1929	1,972	1,822	1,713	1,082	1,151
1930	1,939	1,683	1,618	1,152	1,198
1931	1,752	1,479	1,448	1,185	1,210
1932	1,630	1,403	1,377	1,168	1,160
1933	1,584	1,345	1,335	1,178	1,187
1934	1,500	1,385	1,355	1,148	1,173
1935	1,609	1,420	1,380	1,133	1,166
1936	1,635	1,461	1,409	1,119	1,160

NOTE.—For years prior to 1914, the nominal wage index-numbers relate to the end of the year only, but from 1914 onward these figures, in addition to those for retail prices, are averages for the whole year.

§ 3. The Basic Wage in Australia.

1. **General.**—The “basic wage” in Australia is understood to mean the lowest wage which can be paid to an unskilled labourer on the basis of “the normal needs of an average employee regarded as a human being living in a civilized community.”* This wage is fixed by various industrial tribunals in Australia operating under Commonwealth and State Arbitration Acts, and is varied from time to time according to changes in cost of living, constitution of the family unit, etc. In addition to the “basic” wage, these tribunals also determine what is known as the “secondary” wage—“the extra payment to be made for trained skill or other exceptional qualities necessary for an employee exercising the functions required.”† The term “minimum” wage, on the other hand, is used to express the lowest rate payable in a particular industry, and is either equal to, or greater than the “basic” wage.

2. **The Commonwealth Basic Wage.**—(i) *General.* The doctrine of a basic wage was propounded as far back as 1890 by Sir Samuel Griffith, Premier of Queensland, and the same principle was enunciated in the New South Wales Arbitration Court in somewhat similar terms by Mr. Justice Heydon in 1905. In spite, however, of these pronouncements and the fact that wage-fixing tribunals had been in operation as early as 1896 (in the State of Victoria), it was not until the year 1907 that the first basic wage, as such, was declared by a Court in Australia. This declaration was made by Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration, and is popularly known as the “Harvester Judgment” on account of its having been determined in connexion with H. V. McKay’s Sunshine Harvester Works. The rate of wage declared in this case was 7s. per day or £2 2s. per week for Melbourne, the amount considered reasonable for “a family of about five,” and was generally referred to as the “Harvester” wage. The constituent parts of this amount were £1 5s. 5d. for food, 7s. for rent, and 9s. 7d. for all other expenditure.

The “Harvester” basic rates for all other towns throughout Australia were fixed at practically the same rates until the year 1913, when the Court took cognizance of the Retail Price index-numbers, covering food and groceries and rent of all houses, (“A” Series), for the 30 more important towns of Australia, which had been published by the Commonwealth Statistician for the first time in the preceding year. These index-numbers had been taken back to 1901, with the year 1911 as base, and disclosed not only considerable percentage increases since 1907, but also large disparities in the relative purchasing power of money in the various towns. The basic rates for towns were thereafter fixed on their respective index-numbers, taking the index-number 875 for Melbourne for the year 1907 as being equivalent to 42s. per week, or the base of the table 1,000 as being equivalent to 48s. per week. Exceptions were made in the case of many country towns, where certain “loadings” were applied to counterbalance their lower index-numbers due to cheaper rentals.‡

In 1922 an amount known as the “Powers’ 3s.”§ was added as a general “loading” to the weekly wage for the purpose of securing to the worker during a period of rising prices the full equivalent of the “Harvester” standard. In the same year the system was instituted of making regular quarterly adjustments of the basic wage to accord with variations in purchasing power as disclosed by the “A” Series retail price index-numbers.

The Commonwealth Conciliation and Arbitration Act provides that the “basic” wage, or any alteration thereof including the principles on which it is computed, together with any variation or interpretation of any award involving any such alteration, shall be considered by a Court constituted by the Chief Judge and not less than two other Judges, and must be approved by a majority of the members of that Court. By a

* Mr. Justice Higgins—*A New Province of Law and Order.*

† *Ibid.*

‡ As these indexes covered only about 60 per cent. of household expenditure, a low index due to low rentals would wrongly presume low costs in the remaining uninvestigated 40 per cent. of household expenditure and vice versa.

§ Awarded by Mr. Justice Powers in the Gas Workers’ case.

judgment of the High Court on the 21st April, 1933, the "basic" wage is taken to mean for the foregoing purpose, not only the "Harvester" wage but any "loadings" forming part of the primary wage of an unskilled labourer. A "loading" is defined as an addition to the "basic" wage as compensation for some peculiar condition of labour or environment, and not by way of "margin for skill." The wage payable for skilled labour is assessed on the basis of the "basic" wage, including "loadings."

The adequacy or otherwise of the "Harvester" standard has been the subject of much discussion, the author of the judgment himself urging on several occasions the need for its review. The abnormal conditions during and for some time after the war hindered such a review which was regarded as less urgent by reason of the fact that wages throughout Australia were being automatically adjusted to changes in retail prices. A Royal Commission (referred to later) was appointed in 1920 to assess a basic wage, but its recommendations were not carried out.

No change was made in the method of fixation and adjustment of the basic wage until the onset of the depression, which began to be felt severely during 1930. Applications were then made to the Court by employers for some greater measure of reduction of wages than that afforded by the automatic adjustments to falling retail prices. An account of the proceedings which resulted in the Court reducing all wages under its jurisdiction by 10 per cent. from the 1st February, 1931, is given in Labour Report No. 23, page 74. Reference is also made to the Court's refusal in June, 1932, and May, 1933, to remove this special reduction.

(ii) *Basic Wage Inquiry, 1934.* The "Harvester" standard, adjusted to retail price variations, continued as the theoretical basis of the wage of the Commonwealth Court until 31st May, 1934, when it was superseded by a judgment delivered on 17th April, 1934, full particulars of which appear in preceding issues of the Year Book. The basic wage declared on this occasion (known as the "Restoration Basic Wage, 1934") was as follows for the six capital cities:—

			<i>s.</i>	<i>d.</i>				<i>s.</i>	<i>d.</i>
Sydney	..	..	67	0	Adelaide	..	..	64	0
Melbourne	..	..	64	0	Perth	..	..	66	0
Brisbane	..	..	61	0	Hobart	..	..	67	0

Six Capital Cities, 65s. od.

The 10 per cent. special reduction in wages referred to above ceased to operate upon the introduction of the new rates, and the basis of the periodical adjustments to retail price variations was transferred from the "A" Series to the "C" Series of Index-Numbers. The latter Series covers Food and Groceries; Rent of 4-roomed and 5-roomed Houses; Clothing; Fuel; Light; Household Utensils; Household Drapery; Fares; and other Miscellaneous household requirements. The base of the table (1,000) was taken by the Court as equal to 81s. per week. This gave the above rates for the capital cities, which are proportionate to their respective index-numbers. In effect, the new rate for the Six Capital Cities was the same as that previously paid under the "A" Series, without the "Powers" 3s., and without the 10 per cent. reduction. Certain towns gained and others lost in comparison with rates under the "A" Series, owing to the different relationship of towns under the "A" and the "C" Series.

(iii) *Basic Wage Inquiry, 1937.* In May, 1937, the Commonwealth Court heard an application by the combined Unions for an increase in the basic wage. The Unions asked that the equivalent of the base (1,000) of the "C" Series Index be increased from 81s. to 93s. which on current index-numbers would have represented an average increase of about 10s. per week. The hearing extended from 10th May, to 4th June, 1937, and the Court delivered judgment on 23rd June. The chief features of the judgment were—

(a) Various amounts were added to the basic wage not as an integral, and therefore adjustable, part of that wage, but as "loadings" on the rates that would have been payable under the "shilling table" as determined by the 1934 judgment. The latter

was referred to in the judgment as the "needs" portion of the total resultant basic wage. The "loadings" and resultant "total basic wages" for the six capital cities were as follows:—

City.	"Needs" Basic Wage	"Loading."	Total Basic Wage.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Sydney	72 0	6 0	78 0
Melbourne	69 0	6 0	75 0
Brisbane	68 0	6 0	74 0
Adelaide	68 0 (a)	4 0	72 0
Perth	70 0 (a)	4 0	74 0
Hobart	70 0 (b)	4 0	74 0
Six Capitals	70 0	5 0	75 0

(a) An additional 1s. was actually being paid under the "2s. minimum adjustment" provision.

(b) Represents 1s. gain on rate actually being paid.

The above were not to apply to railway employees, to whom the Court granted "loadings" of 5s. in New South Wales and Victoria, and 3s. in South Australia and Tasmania. Workers in the provincial towns were to receive "loadings" 6s. in New South Wales, Victoria and Queensland; and 4s. in South Australia, Western Australia and Tasmania. The Maritime workers were granted a "loading" of 21s. 6d. per month, and the Pastoral workers received increases proportionate to the increase of the flat basic rate, from 68s. to 77s. in respect of the basis of piece work rates. Station hands received an increase of 3s. per week.

The "loadings" were to come into operation by instalments as follows:—

"Loading."	Instalments.	Date of Operation. (First pay period to begin in—)
<i>s. d.</i>	<i>s. d.</i>	
6 0	3 0	July, 1937
	3 0	October, "
5 0	3 0	July, "
	2 0	October, "
4 0	2 0	July, "
	2 0	October, "
3 0	2 0	July, "
	1 0	October, "

The Maritime, Pastoral and Gas Workers' increases were to become fully operative in the first pay period in July.

(b) The former proviso that no adjustment of wages should take place unless the amount of variation reached at least 2s. was rescinded in favour of minimum variations of 1s. per week.

(c) The general policy laid down in the previous judgment in regard to rates for country towns was retained, with the exception that the rates for Geelong and Warrnambool were made the same as those for Melbourne.

(d) The basis of the adjustment of wages in accordance with the variations shown by retail price index-numbers was transferred from the "C" Series to a special "Court" Series based upon the "C" Series, for an explanation of which see page 574.

(e) Female and Junior rates were left for adjustment by individual Judges when dealing with specific awards.

The main parts of the Judgment are reprinted below :

BASIS OF CLAIM.

"The Court is asked by united applications on behalf of organizations of employees covered by its awards to increase the basic wage prescribed therein by an amount which on the present adjusting index-numbers would average about 10s. and also to prescribe that the minimum wage for adult females shall be 60 per cent. of the basic wage for males. The application was made mainly on the ground that since 1934 economic recovery as reflected in increased productivity and national income and the restoration of the level of export prices had been great enough to justify more than full restoration of the basic wage operating at the time the 10 per cent. reduction was made. In the main, restoration of productivity and of national income to the 1929 level notwithstanding alterations in the economic structure was established. The Court in effect was faced with the converse position to that which led it to decide on a reduction in 1931 and it was contended that "all economic arguments then advanced in favour of a reduction should now be reversed and used in favour of an increase". The main arguments which led to the reduction were—

Decline in national income ;

Increasing unemployment ;

Violent fall in export prices ;

Sudden cessation of the expenditure by Governments of moneys borrowed from overseas ; and

The precarious position of primary industries.

The evidence as to the extent of economic recovery since the date of the Court's 10 per cent. reduction order can be summarised as follows :—

Primary Production.—The following table prepared by the Commonwealth Statistician shows the quantitative production of the principal primary products increased by 25 per cent. between the years 1925-26 and 1934-35 :—

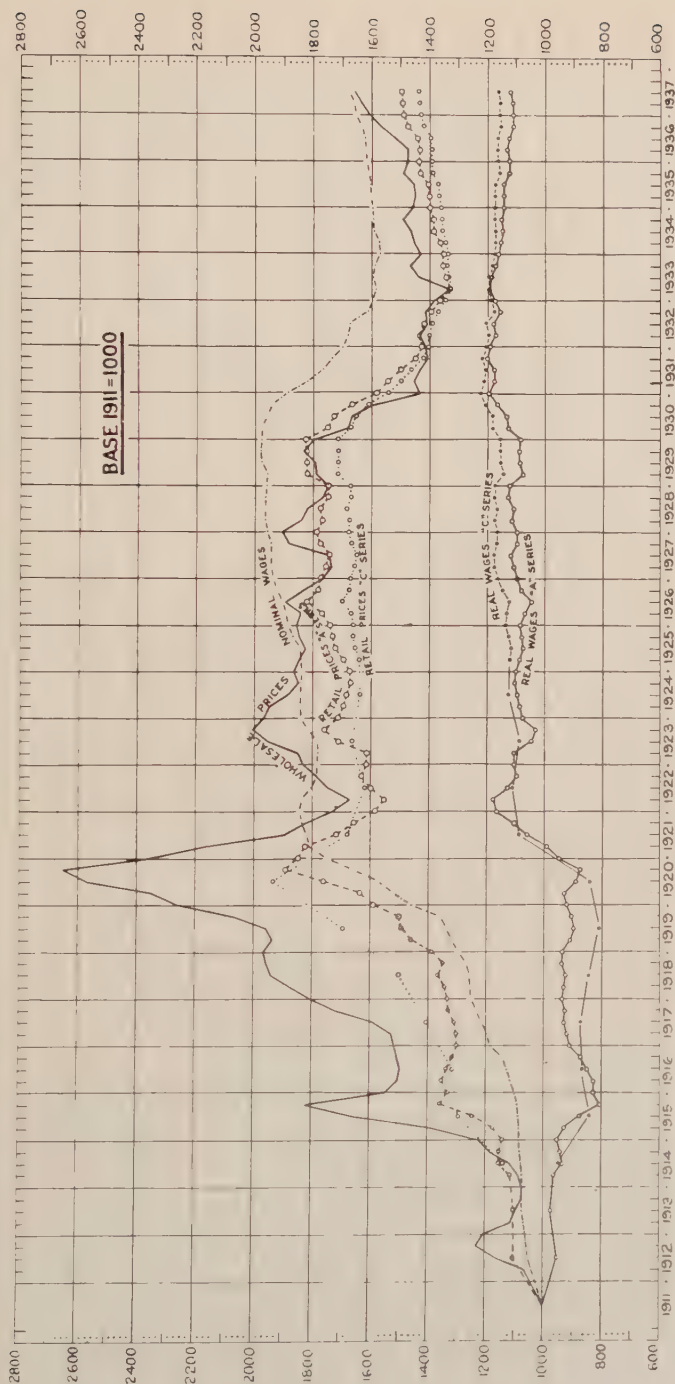
INDEX-NUMBER OF QUANTITY PRODUCTION IN AUSTRALIA.

Industry and Group.						1925-26.	1934-35.
<i>Agriculture—</i>							
Cereals	..	..	..	..	..	1,000	1,219
Root crops	..	..	..	..	..	1,000	995
Fruit	..	..	..	..	..	1,000	1,186
Miscellaneous	..	..	..	..	..	1,000	1,233
Total Agriculture						1,000	1,206
<i>Pastoral—Wool</i>							
Dairy produce	..	..	..	..	..	1,000	1,218
	..	..	..	..	..	1,000	1,431
Total						1,000	1,255

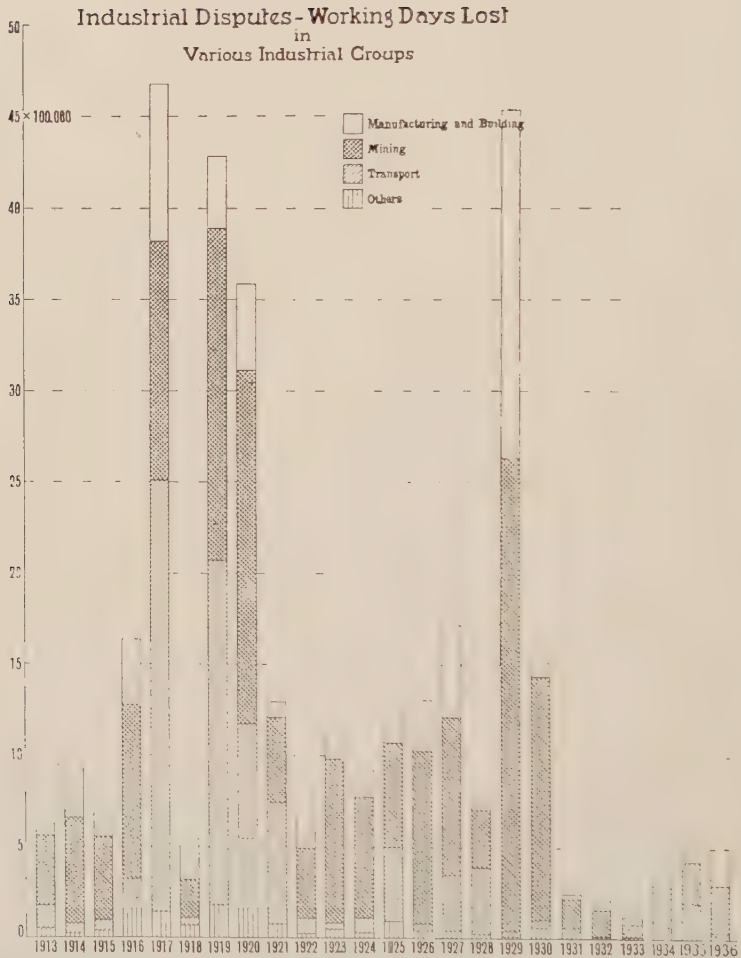
During the same period the number of persons permanently employed in rural industries increased from 432,134 to 451,177 or approximately 5 per cent. Such later figures as are available indicate that since 1935 there have been only the usual seasonal variations in quantities. Taking the export price index-number as a guide the general average of prices prevailing in 1928-29 has been restored.

The increased production of gold at higher prices is too well known to call for comment. Prices for base metals are higher than in 1929.

WHOLESALE AND RETAIL PRICES, NOMINAL AND EFFECTIVE OR REAL WAGE INDEX-NUMBERS, AUSTRALIA, 1911 TO 1937.



NOTE. The index-numbers in the above graph are for the six capital cities as a whole, with the exception of those for Wholesale Prices which are for Melbourne. They are all calculated to the common base 1911-1920, the scale for which appears on the left of the graph. They are shown *quarterly* from the year 1912 in the case of the "A" Series Retail Prices (food, groceries and rent of all houses) and Wholesale Prices (Melbourne). The "C" Series Retail Prices (food, groceries, rent of 4 and 5 rooms, clothing and miscellaneous household expenditure) are shown *quarterly* from the year 1915. Nominal Wages are shown *quarterly* from 1914, and Real Wages *quarterly* from 1914 for the "A" Series, and from 1925 for the "C" Series.



EXPLANATION.—The scale refers to working days lost in hundred thousands. Thus, taking the year 1917, and comparing the shaded and blank sections with the scale, it will be observed that about 870,000 working days were lost in Manufacturing and Building, over 1,300,000 in Mining, over 2,300,000 in Transport, and about 150,000 in other industries.

Manufacturing.—Manufacturing industries since 1928-29 have been more than restored to the 1929 level.

The total value of production computed on the basis of retail prices in 1911 between 1928 and 1936 increased from £93,906,619 to £102,592,707 with less than 1,000 increase in the number of employees engaged. The value of production per employee computed on the same basis increased from £208 in 1928-29 to £228 in 1934-35. Such figures as are available disclose that this increase has been maintained since 1936.

Public Finance.—Public finance has vastly improved. States still have budgetary difficulties to contend with mainly owing to deficits in railway undertakings. These difficulties have been taken into account in fixing the railway rates as hereafter appear. Increases of revenues which keep pace with general increase in prosperity, provided due economy is shown and there is no undue haste in remitting emergency taxation, should before long enable Governments to pay their way.

Private Finance.—In the general field of commerce and finance, distributed profits and reserves, adjusted in the same way as wages according to the present purchasing power of money, have been steadily increasing since 1934, and judging by the latest balance sheets available are still on the up grade. The remarkable increase during the last twelve months in the quoted values of shares in public companies indicates that confidence in present and future stability of private enterprise has been re-established.

NATIONAL INCOME AND EFFECT OF CESSATION OF OVERSEAS BORROWING.

“Using such methods of calculation as are available it may reasonably be inferred that real national income per head is now as great as before the depression. Unemployment has rapidly decreased, and at the moment, with a falling trend, is little if any in excess of that of normal years. Export prices have reached the level of 1928. The Commonwealth has adapted itself mainly by increased manufacture to the absence of overseas borrowing. An able economist called as a witness by the Court—Mr. Reddaway—who, as well as his own opinion, voiced that of eminent economists of the University of Melbourne well acquainted with Australian conditions, effectively contended that ‘The effect of overseas borrowing was that men were employed in what was virtually export industry. They were producing public works of various sorts, and although these were not physically exported yet the same immediate effect was obtained by exporting corresponding government obligations. These ‘exports’ enabled Australia to obtain various commodities as imports in exchange. When the borrowing ceased this particular export industry was of course extinguished. The immediate effect was disastrous because the Australian economy could not be readjusted in a day. But if time were allowed for adaptation then there need be no permanent fall in employment and the effect on consumption should be quite small. Previously men had been producing public works for export and obtaining manufactures in exchange; they had now to be transferred either to other export industries, or to producing the manufactures in Australia. Once this was done there would only be a loss of consumption insofar as the new occupations were less productive; and of course any loss on this account might be more than offset by improved efficiency in other industries. This process of adjustment has now been virtually completed. The figures for overseas trade for 1936-37 will show exports somewhat higher (in Australian currency) than in 1928-29, and imports about £30,000,000 lower. The correspondence is remarkably good considering the other factors which might have altered. Moreover a direct estimate of the replacement of imports by home production was made by Mr. L. G. Melville of the Commonwealth Bank. Though necessarily subject to a considerable margin of error, this substantially confirmed the view that the expansion has replaced imports to about the value of the pre-depression borrowing.

So far, therefore, from the absence of borrowing being a source of weakness, it adds greatly to the strength of the position. The new method of manufacturing the goods in Australia (instead of importing them in exchange for the equivalent of public works) may not yield quite such good immediate results; we see this in the fact that the new industries receive protection so that £100 will not buy as much of their products as it would of imports. But this is a comparatively small matter representing a loss of real

income of perhaps £5,000,000; it has been much more than offset by increased efficiency in production as a whole which has been secured since 1929 and hardly needs consideration as a separate factor, whilst there is a very large item to be entered on the credit side in the fact that there is no longer a risk of sudden dislocation due to a restriction of loans. This increased security does not directly add to the immediate power of industry to pay higher wages, but it enables one to take a much more confident view of the future.'

POSITION OF PRIMARY INDUSTRIES.

"As to primary industries, with the restored export price level the difficulties of graziers and farmers are now mainly attributable to causes which are not so seriously affected by wage level. As Mr. Reddaway further said—'With export prices at present levels the farmers' financial difficulties mostly arise out of the excessive prices at which they bought their land. If they had paid for it in cash they would simply have found they had made a bad investment, and would naturally have had to take the consequences in getting little return on their capital. In fact they largely borrowed the money so that when their equity margin disappeared they were immediately in difficulties. This created a grave social problem, but it is not one which should or can be rectified by adjusting wages. It calls for an adjustment on capital account, and this is in fact being effected through debt adjustment boards and revaluations. Wages only affect the current position and this is for the most part satisfactory; sale prices are about at pre-slump levels whilst money wages and the cost of living are considerably lower.'

EMPLOYERS' CONTENTIONS.

"Employers' representatives urged that the Court should not regard this return to pre-depression prosperity as likely to endure. The possibilities of another war were canvassed. Such a possible contingency cannot affect the Court's decision. If such disaster again overtakes civilization then what industrial tribunals do or have done will be of little importance in the inevitable economic collapse which would follow. It was also urged that the restoration of export prices to pre-depression levels and the expanding of manufacturing industries with a corresponding reduction of imports may only be transitory. This may or may not be true. But the upward trend since 1935 has, on the whole, brought the Commonwealth to at least pre-depression levels with the advantage that it does not now rely on a large expenditure of overseas public borrowings.

The possibilities of the future cannot be foreseen. The Court can only be guided by existing conditions and be prepared at any time to vary its orders as those conditions materially vary, either upwards or downwards.

EFFECTS OF HIGHER WAGES ON INVESTMENT.

"The advocates appearing for employees urged that there should be a substantial addition to the equivalent of the 1929 wage and found support for this claim in the statement of Mr. Reddaway endorsed as it was by Professors Copland and Giblin and Dr. Wood. This statement definitely asserted that economic recovery justified restoration of the 1929 level and that economic tendencies towards a fresh boom rendered a somewhat higher level advisable. Mr. Reddaway's argument in support of this contention was that unless wage rates were increased the expectation of increased profits will cause entrepreneurs to start superfluous new enterprises or excessively expand existing ones. Beyond a point this tendency might produce a most unhealthy boom, particularly when unemployment had been reduced to normal. It would also be accompanied by a rapid rise in the price of existing assets (already in evidence in the stock and share market). The resulting undesirable speculation would cause trouble if there is a subsequent decline. Higher wages would induce more sober estimates of the prospects whilst delay in raising wages would directly contribute to undue inflation of values. A rise in real wages would now be extremely valuable as a restraining influence, both on the price of existing capital assets and the excessive construction of new ones. A re-distribution of income in favour of wage earners, who unlike other classes spend their share of income without delay, will accelerate the demand for products and so provide solid support for legitimate expenditure on capital goods.

Applying this theory to existing circumstances, Mr. Reddaway originally urged that the equivalent of the 1929 wage should be restored with an addition of from 2s. to 3s. Subsequently he admitted that he was not in possession of information as to recent advances in real wages by way of increased marginal allowances and did not adhere to the actual addition of from 2s. to 3s. But he adhered to his opinion that the rate fixed by the Court should exceed the restoration of the 1929 standard.

Advocates for the employers presented a statement in reply to that of Mr. Reddaway evidently prepared by an expert economist who preferred to remain anonymous. The Court, although it had not an opportunity to discuss with its author the opinions expressed and was deprived of the assistance derived from cross-examination, paid close attention to this document and to Mr. Reddaway's subsequent reply. The statement did not dispute that there should be some rise in the wage level but sought to discount the facts and theories applied thereto on which Mr. Reddaway based his contentions. It is impracticable to analyse paragraph by paragraph this controversy between two economists with different approaches to the problem which the Court must solve. All that need be said is that the statement was closely considered with the mass of spoken and quoted economic material submitted in evidence. The opinions of economic experts of course are not conclusive. But those offered in these proceedings by Mr. Reddaway unchallenged as they were by any other economist willing to disclose his identity were more impressive than usual.

EFFECTS OF HIGHER WAGES ON CONSUMPTION.

"In effect the economist's statement in support of an increase of wages is an endorsement of the theory that one of the causes of cycles of depression is a recurring lack of balance in the application of the *money* income received by the members of the community. This money income is broadly speaking equal to the money value of all real income of the community in goods made for sale and services rendered for payment in money. For the enjoyment of prosperity in a modern industrial community the money income and the real income should be in a constant full flow of mutual interchange. The spending of all the money income, which has really been created as a result of the production and supply of previous goods and services, now creates a market for further goods and services being produced and offered. As put in the old phrase "Money would be circulating" and business and employment would be good. Subject to a reservation as to over spending on producer goods, it is immaterial whether the spending is done by the capitalist section or by the wage earner section of the community, so long as it is done in the community and done quickly. In either case the money cannot be spent without resulting employment and wages or payment for wage earners or other workers who supply goods or services. But there is this difference between the spending by the capitalist section and the spending by the wage earner section of the money of which they gain control. The wage earner section has to spend its money at once within the community and to that extent keeps alive the market for the suppliers of goods and services. So far as the capitalist section spends at once within the community the money in its control, it also keeps that market alive. But it is more likely to spend some of its money abroad and thus reduce that market. More important however is the fact that it may become infected with a lack of confidence in the outcome of investment of that part of its money not spent in consumer goods or services—"money commonly called 'savings'"—and refrain from investing the savings, with the result that the money is not spent promptly. So far as it so refrains, it kills the market for the suppliers of goods and services, wage earners lose employment and wages, and other suppliers find it useless to produce. The economic problem therefore is to arrive at a wage level, which, while not so high as to prevent the capitalist section investing all the "savings" which come into its control, is not so low as to allow money to pass to the capitalist section, which may not spend it promptly within the community, from the wage earner section which would forthwith use it within the community to buy goods and services. (Apart from economic reasons, there are of course humanitarian reasons why the wage level should be made as high as is economically possible, but for the moment, only economic reasons are being considered). If at any time it is made to appear that the

capitalist section for other reasons than an excessively high level of wages then prevailing is refraining from investing "savings" in its control, it may be quite good policy to raise the wage level so as to transfer the spending power from it to the wage earner section. It does not appear to be suggested that this is the position at present in the Commonwealth. But it is conceivable that such a position may exist at some time in a country, while at another time in the same country entrepreneurs may be showing a tendency to invest "savings" to an excessive extent in producer goods and thus to lead up to a boom and subsequent slump. The two conditions may tend to be alternative both of them largely due to prevailing states of mind. In either case a raising of the wage level may be indicated as a remedy, but obviously no economic physician can prescribe with precision the proper amount of the dose. Mr. Reddaway and the other economists who concur with him, diagnose the present case as one of a likely boom and slump, and suggest an increase such as has already been referred to. On the other hand the economist with whose aid a statement for the employers was prepared, is sceptical as to the likelihood of a boom, and thinks that caution should be used in dealing with wages, although he does not appear to be absolutely opposed to any present increase.

PRE-DEPRESSION WAGE RATES.

"For some years prior to the slump in 1929 the amount of unemployment seems to have been about what is normal in industry in modern conditions. This raises a strong presumption that the wage level during those years had arrived at an average amount most suitable for then existing conditions. If present conditions are in substance similar, or, possibly, somewhat more secure because of internal industrial development, a comparison of the real wage level of those years with the present real level will be a useful guide. It is somewhat doubtful, however, whether the price index-numbers and other statistics enable a very close comparative measurement to be made.

The Court's basic wage of the years 1926 to 1929 including the "Powers 3s." and adjusted upon the "A" Series shows the following equivalents of the index-numbers for the first quarter 1937:—

	£	s.	d.		£	s.	d.
Sydney ..	..	3	17	6	Perth ..	..	3 11 0
Melbourne ..	..	3	14	6	Hobart ..	..	3 15 0
Brisbane ..	..	3	12	6	Launceston ..	..	3 12 6
Adelaide ..	..	3	9	0	Six Capitals ..	..	3 14 6

INCREASES IN MARGINAL RATES.

"But in comparing the real wage level of the years 1926-1929 with the present day level there must be brought into account not only the difference in the basic wage but also increases in marginal rates made since those years.

In the Metal Trades industries award of 1935 the margins of skilled mechanics (a diminishing and comparatively small section of the total employees of the industry) were increased by 3s. per week. Early this year a further 3s. was added to this increase while 2s. was conceded to most other classes of labour in the industry. In the Textile industry in devising the first national awards of 1933* rates were reduced in New South Wales and increased in other States the net result being an appreciable aggregate increase. In some other industries margins have been somewhat increased since 1934. But in many there has been no appreciable change. Some of the increases have been met by re-organization of methods resulting in the employment of less labour. As Mr. Reddaway pointed out, between December, 1928, and September, 1936 (the last statistical quarter available) the index of average wages for adult males in Australia as a whole fell approximately 18 per cent. Over the same period the "C" Series for the six capital cities fell by about 16 per cent. disclosing an appreciable fall in the general average of real wages notwithstanding marginal increases. Furthermore, the construction of the index-number is such that it shows too high a figure at a time by increasing margins because of lack of proper weighting of the skilled and unskilled workers. If relationships

* 32 C.A.R., pp. 611 and 744.

between skilled and unskilled groups had been the same, weighting would have no influence. But when the groups which had received marginal increases were substantially in the minority weighting would appreciably alter the ascertaining of a general average. Up to the September quarter of 1936 it is therefore reasonable to conclude, so far as conclusions can be arrived at from statistical data, that advance in the aggregate of real wages arising from marginal increases up to the first quarter of 1936 was problematic. Increases since that period probably have increased the average of real wages. But unless such an increase is substantial it should not bear much weight in fixing a basic wage level appropriate to present economic circumstances. The increases to skilled tradesmen in the Metal Trades industry, and presumably in other industries, were a long-delayed recognition of the disparity between the wages of skilled and unskilled workmen. Then again such increases did not raise the average earnings of those on or near the base rate. A substantial increase in the basic wage may compel temporary or permanent reconsideration of the higher margins. But that is a matter for the future.

HIGHER BASIC WAGE DESIRABLE.

"After grave consideration the conclusion arrived at is that the present degree of prosperity in the Commonwealth and the existing circumstances of industry make desirable appreciable increases in the basic wage.

DIFFERENTIAL INCREASES.

"But the question whether the increase should be of the same amount throughout the States is one of very serious importance. Hitherto the Court has assessed the basic wage so as to give it a substantially equal value in commodities in all the States, subject to slight modifications where it was thought that the advantages of an equal money wage in the various places covered by the particular award should prevail. The principle of equality in commodity value was appropriate for a basic wage, the main policy of which was to secure a particular standard of living for wage earners whatever might be the conditions of the industry or district in which they were engaged. The establishment of such a standard was thought to be socially desirable. Even though some industries might find it difficult to provide the wage, it was nevertheless deemed to be better to impose upon them that wage standard, and if they could not naturally sustain it, either aid them in some other way or let them perish. The standard of living aimed at must always be limited by the productivity of the country generally and therefore inasmuch as the Court cannot differentiate between the wage earners according to their dependants, the basic wage earner with a large family must often suffer and see his family suffer lamentable deprivations. The Court has no power to remedy this evil. So far as the basic wage is imposed for the purpose of providing for fundamental needs it should be substantially uniform in real value. But where an addition is to be made to the basic wage because of prosperity which may not exist to the same degree nor at all in some States, or because of some economic purpose the desirability of which varies in different States, there is not the same reason for uniformity in the addition.

BASIS OF NEW BASIC WAGE.

"The wage assessed on the basis introduced in 1934 and now in force was regarded by the Court as closely approximating the equivalent of the then Harvester standard (without the "Powers 3s."). Adjusted as it now is by the "C" Series of index-numbers the present rate maintains that approximation. This "needs" basic wage will continue, but with loading additions, because of present prosperity and of stabilizing reasons. These loading additions will not be uniform but are assessed in amount according to the circumstances of the State concerned. They will not be adjustable but constant. The amount of the "needs" basic wage plus the respective loading will be the total *basic* wage for the purpose of the award in which they are prescribed.

After considering the comparative suitability for industry of the different States, their industrial development, advantages, and handicaps, and the material submitted, in respect of South Australia particularly, the opinion was formed that the highest loading should be made for New South Wales, Victoria and Queensland and a lower loading for South Australia, Western Australia and Tasmania.

South Australia financially is the weakest of the States and has only one highly developed manufacturing enterprise, motor body building, established in the days when a lower wage level to some extent balanced the disadvantages of distance from the eastern market.

The result of imposing a basic wage which would bring South Australian wage costs to the same level as those of other States would probably accelerate the tendency to concentrate the motor industry in one of the eastern capitals. The Court is anxious not to take any action which of itself may disturb the present distribution of industrial activity amongst States.

In the South Australian Railways it also seems likely that too high a rise in wage costs would probably result in curtailment of services which must outweigh benefits of increased nominal wages. Similar considerations apply to Tasmania and Western Australia.

The loadings in cases where the basic wage is assessed on Six Capital or other combinations of index-numbers appear later herein.

PROVINCIAL RATES.

"As to the basic wage in provincial districts generally speaking the existing differentiation of 3s. between their rates and those of metropolitan districts will be continued.

FEMALE RATES.

"The minimum rates for adult females it is thought should be increased so as to be substantially in the same proportion to the new total basic wage as they bore to the present basic wage in the respective awards.

"COURT" SERIES OF INDEX-NUMBERS.

"The Commonwealth Statistician has informed the Court that there is much misunderstanding concerning the position of his department in relation to the basic wage. Many people seem to think that because the index-numbers, which are used by this Court for purposes of adjustment, are compiled by the Statistician, he has some connexion with the fixation and adjustment of the wage. Inquiries are made of his department as if it had some official supervision of the wage. Quite obviously conditions which create this impression are improper. Any custom or practice which engenders this false belief concerning his department's functions should be abandoned. It is suggested that the Court should have prepared and issued its own series of retail price index-numbers to be used for adjustment of the basic wage in its awards, this Court series to be based upon and to correspond with the Statistician's "All Items" Series, but to be specially numbered in a manner much more convenient for adjustment of the basic wage than any other series. This Court's series would be issued by the Court and not by the Statistician.

The Court is also informed by the Statistician that he and the State Statisticians have decided that very soon the "All Items" index-numbers, although compiled on the same material as at present, will be calculated to a different base. This would cause a change from the numbering in the present "C" Series and necessitate a consequential alteration in nearly all the Court's awards unless obviated by the Court in some way. For this reason also, it is desirable that the Court should issue a retail price index series of its own, the numbering of which would remain the same, notwithstanding any change by the Statistician of the base to which his "All Items" index-numbers are calculated. As the Court will have to vary its awards in order to prescribe the new basic wage, it is a convenient time to introduce its own table and this will be done. The table will be prepared from the "C" Series as follows:—

At present the Court's adjustable basic wage—the "needs" basic wage as it has been termed herein—is assessed at such an amount that if the "C" Series number for a quarter were 1000 the corresponding "needs" basic wage would be 81s. The Court's

present table of wages is compiled on this basis. For the Court's own series the numbers will be obtained thus—The "C" Series number for the quarter in question will be multiplied by $\frac{81}{1000} = .081$, and the first three numbers on the left of the product will be the corresponding number in the Court's series. That corresponding number will itself state in whole and decimal figures the number of shillings with current purchasing power equivalent to that of 81s. when the "C" Series index-number is 1000."

3. *State Basic Wages.*—(i) *New South Wales.* The first determination under the New South Wales Industrial Arbitration Act of a standard living wage for adult male employees was made on the 16th February, 1914, by the Court of Industrial Arbitration. The Board of Trade was established in 1918 with power to determine the living wage for adult male and female employees in the State: the Board made numerous declarations from 1918 to 1925, but ceased to function after the Industrial Arbitration (Amendment) Act 1926 established the Industrial Commission of New South Wales, which exercised the powers of the Board of Trade from the 15th April, 1926.

The adult male rate was determined on the family unit of a man, wife and two children from 1914 to 1925; a man and wife only in 1927, with family allowances for dependent children; and a man, wife, and one child in 1929, with family allowances for other dependent children.

Employees in rural industries are not covered by the rates shown in the following table; a living wage for rural workers of £3 6s. per week was in force for twelve months from October, 1921, and a rate of £4 4s. operated from June, 1927 to December, 1929, when the power of industrial tribunals to fix a living wage for rural workers was withdrawn.

The variations in the living wages determined by the industrial tribunals of New South Wales are shown below:—

BASIC WAGE VARIATIONS IN NEW SOUTH WALES.

Male.		Female.	
Date of Declaration.	Basic Wage per Week.	Date of Declaration.	Basic Wage per Week.
	£ s. d.		£ s. d.
16th February, 1914 ..	2 8 0	..	..
17th December, 1915 ..	2 12 6	..	..
18th August, 1916 ..	2 15 6	..	..
5th September, 1918 ..	3 0 0	17th December, 1918 ..	1 10 0
8th October, 1919 ..	3 17 0	23rd December, 1919 ..	1 19 0
8th October, 1920 ..	4 5 0	23rd December, 1920 ..	2 3 0
8th October, 1921 ..	4 2 0	22nd December, 1921 ..	2 1 0
12th May, 1922 ..	3 18 0	9th October, 1922 ..	1 10 0
10th April, 1923 ..	3 19 0	(a) ..	2 0 0
7th September, 1923 ..	4 2 0	..	2 1 0
24th August, 1925 ..	4 4 0	..	2 2 0
27th June, 1927 ..	4 5 0	..	2 6 0
20th December, 1929 ..	4 2 6	..	2 4 0
26th August, 1932 ..	3 10 0	..	1 18 0
11th April, 1933 ..	3 8 6	..	1 17 0
20th October, 1933 ..	3 6 6	..	1 16 0
26th April, 1934 ..	3 7 6	..	1 16 0
18th April, 1935 ..	3 8 6	..	1 17 0
24th April, 1936 ..	3 9 0	..	(h) 1 17 6
27th October, 1936 ..	3 10 0	..	1 18 0
24th April, 1937 ..	3 11 6	..	1 18 0

(a) Dates of declaration from 1923 on same as those for male rate.

(h) Rate declared, £1 15s. 6d., but law amended to provide a rate for females at 54 per cent. of that for males.

After the judgment of the Commonwealth Court referred to on page 564 the Government of New South Wales declared its intention to introduce legislation for the purpose of applying the Commonwealth basic wage to employees in New South Wales working under State awards, and to adopt for this purpose the index figures and the "loading" increases of the Commonwealth Court; this would consequently relieve the State tribunal of the necessity to determine a living wage.

(ii) *Victoria and Tasmania.* A State basic rate of wage is not declared in Victoria and Tasmania. In these States the Wages Board system of wage fixation is in operation, and each Board determines the minimum rate of wage to be paid in the industry or calling under review. In the majority of cases the practice of the Commonwealth Arbitration Court of adjusting wages in accordance with variations in retail prices has been followed in the past by these bodies. In the case of Victoria, by amendments of the Factories and Shops Act No. 4275 of 1934 and No. 4461 of 1936, it is now obligatory on all Wages Boards to adopt such provisions of Commonwealth Awards which such Boards are under the Factory and Shops Acts empowered to include in their determinations. The Secretary of Labour is also empowered under this Act to make adjustments of wages according to variations in retail price index-numbers without calling the Board together.

(iii) *Queensland.* The first formal declaration by the Industrial Arbitration Court in this State of a basic wage was gazetted on 24th February, 1921. Prior to this declaration the rate of £3 17s. per week for adult males had been generally recognized by the Court in its Awards as the basic or living wage. The basic wage is nominally intended to provide for the needs of a man, his wife and three children. The variations in the adult basic wages determined by the Industrial Arbitration Court are shown below :—

BASIC WAGE VARIATIONS IN QUEENSLAND.

Date of Operation.	Adult Basic Wage.			
	Male.		Female.	
	£	s. d.	£	s. d.
1st March, 1921	4	5 0	2	3 0
1st March, 1922	4	0 0	2	1 0
28th September, 1925 (a)	4	5 0	2	3 0
1st August, 1930	4	0 0	2	1 0
1st December, 1930	3	17 0	1	19 6
1st July, 1931	3	14 0	1	19 0
1st April, 1937	3	18 0	2	1 0

(a) Fixed by Basic Wage Act.

The rates shown above are applicable throughout the South-Eastern Division of the State: allowances are added for the following divisions—Northern, 10s.; North-Western, 17s. 4d.; Mackay, 5s. 6d.; and South-Western, 7s. 4d. Half of these allowances are granted to females.

(iv) *South Australia.* The Industrial Code 1920 provides that the Board of Industry shall after public inquiry declare the living wages to be paid to adult male and female employees. Prior to the passing of this Act the living wage was declared by the Industrial Court, the first award, 7s. per day, being made by Mr. Justice Gordon in the Brushmakers' Case in December, 1908.

The first declaration by the Board of Industry was made on 15th July, 1921, when the living wage for adult male employees in the metropolitan area was determined at £3 19s. 6d. per week.

The family unit is not specifically defined in the Code, but it is stated that the South Australian Industrial Court in 1920 definitely decided that the average employee in respect of whom the living wage is to be declared is a man with a wife and three children.

The variations in the living wages determined by the Board of Industry are shown below :—

BASIC WAGE VARIATIONS IN SOUTH AUSTRALIA.

Male.		Female.	
Date of Declaration.	Basic Wage per Week.	Date of Declaration.	Basic Wage per Week.
	£ s. d.		£ s. d.
15th July, 1921 ..	3 19 6	11th August, 1921 ..	1 15 0
11th April, 1922 ..	3 17 6	..	..
19th October, 1923 ..	3 18 6	..	..
30th April, 1924 ..	4 2 0	22nd October, 1924 ..	1 18 0
29th July, 1925 ..	4 5 6	17th August, 1925 ..	1 19 6
11th October, 1930 ..	3 15 0	22nd December, 1930 ..	1 15 0
17th August, 1931 ..	3 3 0	4th December, 1931 ..	1 11 6
18th October, 1935 ..	3 6 0	24th December, 1935 ..	1 13 0
18th December, 1936 ..	3 9 6	9th April, 1937 ..	1 14 9

(v) *Western Australia.* The Industrial Arbitration Act 1912-1934 provides that the Court of Arbitration shall determine and declare a basic wage to operate from 1st July of each year and, wherever and whenever necessary, differential basic rates in special or defined areas of the State. In an amending Act of 1930 provision is made for quarterly adjustments when the Government Statistician reports a variation in the cost of living of 1s. or more per week compared with the previous quarter.

The first declaration of the basic wage by the Court of Arbitration since the authority to fix one was vested in the Court in 1925 was made on 11th June, 1926. The family unit is not specifically defined in the Act, but it has been the practice of the Court to take as a basis for its calculations a man, his wife and two dependent children. The variations in the annual declarations of the Court of Arbitration are shown in the following table :—

BASIC WAGE VARIATIONS IN WESTERN AUSTRALIA.

Date of Operation.	Metropolitan Area.		South-West Land Division.		Other Parts of State.	
	Male.	Female.	Male.	Female.	Male.	Female.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st July, 1926 ..	4 5 0	2 5 11	..	..	4 5 0	2 5 11
1st July, 1929 ..	4 7 0	2 7 0	..	..	4 7 0	2 7 0
1st July, 1930 ..	4 6 0	2 6 5	..	..	4 5 0	2 5 11
1st July, 1931 ..	3 12 0	2 2 2	..	..	3 17 0	2 1 8
1st July, 1932 ..	3 12 0	1 18 11	3 13 6	1 19 8	3 18 0	2 2 2
1st July, 1933 ..	3 8 0	1 16 9	3 9 6	1 17 6	3 17 6	2 1 10
1st July, 1934 ..	3 9 6	1 17 6	3 10 0	1 17 10	3 19 6	2 2 11
1st July, 1935 ..	3 10 6	1 18 1	3 11 2	1 18 5	4 4 4	2 5 6
1st July, 1936 ..	3 10 6	1 18 1	3 11 9	1 18 9	4 6 0	2 6 5
1st July, 1937 ..	3 13 9	1 19 10	3 14 8	2 0 4	4 7 0	2 7 0
26th July, 1937 (b) ..	3 14 11	2 0 5	3 15 10	2 0 11	4 7 0	2 7 0

-(a) Excluding Goldfields areas, where rates were the same as those operating from 1st July, 1926
 (b) Quarterly adjustment.

(vi) *Current State Basic Wage Rates.* In the following table are given the current basic wage rates declared by the various State tribunals:—

BASIC WEEKLY WAGE RATES FIXED BY STATE INDUSTRIAL TRIBUNALS.

State.	Basic Wage.		Date of Operation.	Family Unit (for Male Rate).
	Males.	Females.		
	£ s. d.	£ s. d.		
New South Wales..	(a) 3 11 6	1 18 6	1.5.37	Man, wife and child
Victoria ..	(b)	(b)	(b)	(b)
Queensland ..	3 18 0	2 1 0	1.4.37	Man, wife and three children
South Australia ..	(c) 3 9 6	(d) 1 14 9	..	..
Western Australia..	(e) 3 14 11	2 0 5	26.7.37	Man, "wife and two" children
Tasmania ..	(b)	(b)	(b)	(b)

(a) Plus child allowances. (b) None declared, but follow Federal rates to a large extent.
 (c) Operative from 7th January, 1937. (d) Operative from 23rd April, 1937. (e) Metropolitan Area. Basic wage for Gold-fields Areas and portions of State exclusive of the S.W. Land Division—males £4 7s.; females £2 7s.; Agricultural Areas and S.W. Land Division—males £3 15s. 10d.; females £2 0s. 11d.

4. *Royal Commission on the Basic Wage, 1920.*—The Federal basic wage referred to in par. 2 (i) *ante* was made operative in other parts of Australia on the basis of the relative retail price index-numbers applicable to the locality, but only one comprehensive attempt has been made by the Federal authorities to ascertain specifically what the actual requirements were in the various States according to reasonable standards of comfort, including all matters comprised in the ordinary expenditure of a household in respect of a family consisting of a man, wife and three children under fourteen years of age.

The attempt referred to was made by a Royal Commission, and its report, issued in 1920, recommended the following amounts for the various capital cities:—

	£	s.	d.
Sydney	5 17 1
Melbourne	5 16 6
Brisbane	5 6 2
Adelaide	5 16 1
Perth	5 13 11
Hobart	5 16 11
Six Capitals (Weighted Average)	5 15 8

The recommendations of this Commission were not carried out owing largely to the marked advance of the amounts suggested over ruling rates* and the grave doubts expressed as to the ability of industry to pay such rates.

§ 4. Child Endowment in Australia.

1. *General.*—The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age has become very prominent in Australia in recent years, and is actually in operation in certain instances. The system has been in force in various forms in England and on the Continent as far back as 1795, the first instance occurring in England in that year.†

2. *New South Wales.*—The first attempt in Australia to institute the system was made in New South Wales in 1919, when a Bill was introduced into the State Parliament to provide a flat basic wage for a man and wife, and an allowance of 5s. per week for each child, the latter rate to be reduced on a sliding scale and to cease automatically when the income reached an amount of £3 per week above the basic wage. The Bill

* The "Harvester" equivalent for Melbourne at the time (September quarter, 1920) was £4 13s. per week, but only £3 18s. to £4 2s. was being paid on the basis of an annual index-number.

† A complete survey of the systems in force in various countries is contained in Eleanor Rathbone's *Disinherited Family: A plea for the Endowment of the Family.*

was rejected, but the subject again came up in the Session of 1926-27, when Acts,* which have been amended during subsequent years, provided for the payment of child allowances. These measures provided for (a) the declaration of a basic wage for a man and wife,† and (b) the payment of an allowance of 5s. per week in respect of each dependent child, subject to the provision that child allowances would be paid only to the extent to which the total earnings of the worker and his family fall short of the sum represented by the *basic wage* plus child allowance at the rate of 5s. per week for each child under the age of fourteen years. Thus, a worker with three dependent children receiving £5 by way of wages would not be entitled to the allowance, but would receive it in respect of a fourth child. These payments in New South Wales commenced to operate from 23rd July, 1927. The basic wage was determined for a family unit of a man, wife and one child on 20th December, 1929, and an amending Act, assented to on the 23rd December, 1929, excluded one child in each family from endowment. The fund from which child endowment payments were originally made was created by a levy on the wages bill of employers. The rate of tax to be collected by the Government from employers during the year 1930, was fixed at 1 per cent. From 1st July, 1931, the rate was fixed at 2 per cent., and from 1st January, 1932, at the rate of 5d. in the £1 on all wages above £3 per week. The levy was discontinued as from 1st January, 1934, the cost of endowment being met from the Special Income and Wages Tax, which is also used for other social services. The amount paid away in allowances in 1936 was £1,804,392.

3. **Commonwealth Public Service.** The first system of child endowment in Australia was instituted within the Commonwealth Public Service. It came into operation on 1st November, 1920, when, following on the recommendations of the Royal Commission on the Basic Wage‡, child endowment at the rate of 5s. per week for each dependent child under fourteen years of age was paid to officers, with a limitation of salary plus allowance of £400 per annum. As the result of proceedings before the Public Service Arbitrator in 1923, these allowances were confirmed as a permanent part of the salary scheme, and the necessary fund to meet them was created by deducting the average value of the payment from the basic wage of all adult officers. In effect, therefore, the officers are themselves providing the fund from which the allowance is paid. The deduction was originally £11 per annum, but is now £12. The payment is now limited to officers receiving up to £500 per annum inclusive of the allowance. Details regarding the introduction and method of calculating the payments under this scheme have been published in previous issues of the Official Year Book and will be found also in the Labour Reports issued by this Bureau.

4. **National Scheme.** The Commonwealth Government, in June, 1927, called a conference at Melbourne of the Premiers of the several States to consider the question from a national standpoint. The Prime Minister submitted various estimates of cost of endowing dependent children under fourteen years of age in Australia at 5s. per week. After discussion, it was decided to refer the matter to a Royal Commission, to be appointed by the Commonwealth Government.

The Commission was not unanimous in its findings, and the opinions and recommendations of the members were embodied in two separate reports, which dealt exhaustively with the constitutional aspects, existing systems, industrial legislation, the basic wage, standard of living, regulation of wages, working conditions and cognate matters.

At the conference of Commonwealth and State Ministers held at Canberra during May, 1929, the Prime Minister stated that the Commonwealth Government was not prepared to adopt a scheme financed entirely from the proceeds of taxation, as had been recommended in the minority report. The Commonwealth Government agreed with the

* Family Endowment Act 1927; Finance (Family Endowment Tax) Act 1927; Industrial Arbitration (Living Wage Declaration) Act 1927 and subsequent amendments.

† This was subsequently declared at £4 5s. per week for adult males and £2 6s. per week for adult females. A separate rate for rural employees was declared later at £4 4s. per week.

‡ The Chairman of the Commission (Mr. A. B. Piddington, K.C.), in a supplementary report had suggested that the wage recommended (£5 16s.) be split up into a flat basic wage of £4 and a Child Endowment of 12s. per week for each dependent child, the fund for the payment of this allowance to be created by a tax on employers of 10s. 9d. per employee per week.

majority of the Commission that child endowment could not be separated from the control of the basic wage—a power which the Commonwealth did not possess and which the States were not prepared to relinquish. The Government, therefore, did not propose to establish any system of child endowment. It was generally agreed that any scheme which would increase the charges upon industry would be unwise at that particular time. The matter of child endowment was accordingly left to be dealt with as the State Governments should think proper.

The findings and recommendations in the *majority* and *minority* reports are given in Labour Report, No. 19.

§ 5. Changes in Rates of Wage.

The collection of detailed information relating to changes in rates of wage was discontinued at the end of the year 1929, owing to the difficulty of securing reliable data. Officials of employers' organizations and trade unions reported that they were unable to supply definite particulars as to the number of workpeople affected by Commonwealth and State awards and determinations. In order to secure comprehensive and reliable data it would have been necessary to extend considerably the field of collection, and after serious consideration, and in view of the fact that the demand for the figures had been limited, it was decided that the additional expense and work involved were too heavy to justify the continuance of the tabulation.

C.—EMPLOYMENT.

§ 1. Industrial Disputes.

1. *General.*—Information with regard to the collection of particulars and the methods of tabulation of industrial disputes involving stoppage of work has appeared in previous issues of the Official Year Book, and is also given in the annual Labour Reports of this Bureau.

In *annual* tabulations particulars are included of all disputes which either *commenced* or were *current* during the year under review. As regards "number of disputes", "establishments involved", and "workpeople involved", therefore, duplication will take place in respect of those disputes which started in and were unsettled at the end of a preceding year; the number involved will, however, be indicated in a footnote, to permit of due allowance being made in any calculations made from the tables.

2. *Industrial Disputes Involving Stoppage of Work, Classified in Industrial Groups, 1936.*—The following tables give particulars of industrial disputes which either commenced or were current during the year 1936, classified according to industrial groups. Similar information for the previous years was published in preceding issues of the Official Year Book and Labour Report:—

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO INDUSTRIAL GROUPS, 1936.

Class.	Industrial Group.	Number.	Establishments Involved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	Indirectly.	Total.		
NEW SOUTH WALES.								
II.	Engineering, metal works, etc.	12	15	3,795	164	3,959	185,136	£ 148,026
III.	Food, drink, etc. . .	1	14	71	..	71	3,408	3,224
IV.	Clothing, textiles, etc.	1	1	24	..	24	72	45
V.	Books, printing, etc.	1	1	16	4	20	340	282
VI.	Other Manufacturing	1	1	40	..	40	120	100
VII.	Building	2	2	54	7	61	257	286
VIII.	(a) Coal-mining	160	160	41,580	1,453	43,033	198,658	226,618
	(b) Other mining, quarries, etc.							
XI.	Shipping, wharf labour, etc.	2	6	4,045	..	4,045	25,608	25,061
XII.	Pastoral, agricultural, etc.	1	1	23	..	23	23	10
XIII.	Pastoral, agricultural, etc.	2	24	479	100	579	13,395	8,100
XIV.	Miscellaneous	5	6	430	..	430	5,496	2,617
Total		188	231	50,557	1,728	52,285	432,513	414,375

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO INDUSTRIAL GROUPS, 1936—*continued.*

Class.	Industrial Group.	Num-ber.	Estab-lish-ments In-volved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	In-directly.	Total.		
VICTORIA.								
II.	Engineering, metal works, etc...	4	7	147	19	166	1,328	1,090
VII.	Building	1	10	315	205	520	2,080	1,500
VIII.	Coal-mining	2	2	1,024	..	1,024	7,889	6,851
XIV.	Miscellaneous	3	3	113	..	113	954	398
	Total	10	22	1,599	224	1,823	12,251	9,899
QUEENSLAND.								
II.	Engineering, metal works, etc...	3	3	254	135	389	5,931	4,972
VIII.	Coal-mining	6	6	676	13	689	5,270	5,081
XI.	Shipping, wharf labour, etc. ..	1	1	2	..	2	14	22
XIV.	Miscellaneous	2	2	120	46	166	3,438	2,250
	Total	12	12	1,052	194	1,246	14,653	12,325
SOUTH AUSTRALIA.								
XIV.	Miscellaneous	1	1	101	..	101	505	400
WESTERN AUSTRALIA.								
I.	Wood, furniture, etc.	2	2	26	478	504	1,946	1,437
II.	Engineering, metal works, etc.	1	1	11	..	11	44	41
III.	Food, drink, etc.	2	7	46	..	46	216	222
VI.	Other manufacturing	2	10	250	..	250	1,100	820
VIII.	(a) Coal-mining	1	2	620	100	720	9,360	8,600
	(b) Other mining, quarries, etc.	10	11	2,147	689	2,836	11,602	11,152
X.	Other land transport	1	16	308	42	350	8,050	5,442
	Total	19	49	3,408	1,309	4,717	32,408	27,714
TASMANIA.								
VIII.	(a) Coal-mining	2	2	128	6	134	2,936	2,617
	(b) Other mining, quarries, etc.	1	1	141	..	141	282	195
XIV.	Miscellaneous	1	1	100	..	100	500	400
	Total	4	4	369	6	375	3,718	3,212
NORTHERN TERRITORY.								
XIV.	Miscellaneous	1	1	32	8	40	1,200	900
AUSTRALIA.								
I.	Wood, furniture, etc.	2	2	26	478	504	1,946	1,437
II.	Engineering, metal works, etc.	20	26	4,207	318	4,525	192,139	154,129
III.	Food, drink, etc.	3	21	117	..	117	3,024	3,446
IV.	Clothing, textiles, etc.	1	1	24	..	24	72	45
V.	Books, printing, etc.	1	1	16	4	20	310	252
VI.	Other manufacturing	3	11	290	..	290	1,220	920
VII.	Building	3	12	369	212	581	4,337	1,840
VIII.	(a) Coal-mining	171	172	44,028	1,572	45,600	224,113	249,767
	(b) Other mining, quarries etc.	13	18	6,333	689	7,022	37,582	36,408
X.	Other land transport	1	16	308	42	350	8,050	5,142
XI.	Shipping, wharf labour, etc. ..	2	2	25	..	25	37	38
XII.	Pastoral, agricultural, etc. ..	2	24	479	100	579	13,395	8,100
XIV.	Miscellaneous	13	14	896	54	950	12,093	6,995
	Total	235	320	57,118	3,469	60,587	497,248	468,825

(a) Two disputes in New South Wales (involving two establishments and 133 workers), which commenced in 1935 and were not concluded at the end of that year, are duplicated in the figures for 1936.

3. **Industrial Disputes, Australia, 1932 to 1936.**—The following table gives particulars of the number of industrial disputes, the number of workpeople involved, and the losses in working days and wages caused by disputes which either commenced or were current during each of the years 1932 to 1936, classified according to industrial groups.

Satisfactory comparisons of the frequency of industrial disputes in classified industries can be made only after omitting those which are recorded for coal-mining (Group VIII.). For the year 1913 the proportion of disputes in the mining industry represented practically 50 per cent. of the total number recorded. In subsequent years the proportion remained high, ranging from 45 per cent. in 1917 and 1918 to as much as 81 per cent. in 1921 and 1924. During the last two years disputes in the coal-mining industry represented 67 per cent. of the total. In the past five years working days lost through dislocations involving work people engaged in coal-mining amounted to 756,791, representing 45 per cent. of the total loss of working days during the period :—

INDUSTRIAL DISPUTES.—AUSTRALIA.

Year.	Manu- facturing. (Groups I. to VI.)	Building. (Group VII.)	Mining (Group VIII.)		Transport, Land and Sea. (Groups IX. to XI.)	Miscel- laneous. (Groups XII. to XIV.)	ALL GROUPS.
			Coal Mining.	Other Mining, etc.			
NUMBER.							
1932	20	4	77	8	5	13	127
1933	16	..	52	6	1	15	90
1934	13	1	91	9	6	35	155
1935	21	4	108	9	21	20	183
1936	30	3	171	13	3	15	(a) 235

1932-36	100	12	499	45	36	98	790
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WORKPEOPLE INVOLVED.

1932	8,236	120	19,540	2,602	181	2,238	32,917
1933	5,361	..	17,461	5,415	50	1,826	30,113
1934	7,284	54	23,622	7,862	3,109	8,867	50,858
1935	4,086	49	31,519	2,795	6,142	2,731	47,322
1936	5,480	581	45,000	7,022	375	1,529	60,587
1932-36	30,447	804	137,742	25,096	6,917	17,191	221,797

WORKING DAYS LOST.

1932	50,662	1,561	131,154	21,402	1,038	6,471	212,318
1933	31,625	..	48,528	26,985	100	4,718	111,956
1934	73,878	108	190,363	41,300	14,002	50,235	370,386
1935	62,423	1,294	162,633	61,824	100,774	103,176	495,124
1936	199,641	2,337	224,113	37,882	8,687	25,488	497,248
1932-36	418,259	5,300	756,791	192,593	124,001	190,088	1,687,032

ESTIMATED LOSS IN WAGES.

1932	£ 24,051	£ 1,434	£ 115,407	£ 19,691	£ 720	£ 4,279	£ 165,582
1933	23,407	..	44,927	23,683	90	2,941	95,048
1934	49,364	80	186,027	37,896	10,164	34,328	317,859
1935	47,079	1,143	164,648	57,791	61,240	58,686	390,806
1936	160,259	1,846	249,767	36,408	5,480	15,095	468,825
1932-36	394,100	4,503	760,776	175,469	77,703	115,299	1,437,910

(a) See footnote to Table on page 581.

4. Summary of Disputes (Involving Stoppage of Work), 1932 to 1936.—The following table gives particulars of the number of industrial disputes in each State in the years 1932 to 1936, together with the workpeople involved, the working days lost, and the estimated loss in wages:—

INDUSTRIAL DISPUTES.—SUMMARY.

State or Territory.	Year.	Number.	Establishments Involved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	Indirectly.	Total.		
New South Wales ..	1932	92	99	17,813	2,156	19,969	63,425	64,420
	1933	54	143	13,406	1,663	15,069	53,104	48,760
	1934	117	129	33,065	2,943	36,008	213,753	196,265
	1935	134	162	31,350	2,055	33,405	301,345	237,707
	1936 (a)	188	231	50,557	1,728	52,285	432,513	414,375
Victoria ..	1932	12	37	6,475	170	6,645	99,638	65,599
	1933	12	28	7,156	294	7,450	26,693	20,416
	1934	19	84	8,074	354	8,428	108,872	82,438
	1935	20	30	7,958	243	7,901	45,713	31,280
	1936	10	22	1,599	224	1,823	12,251	9,899
Queensland	1932	10	210	1,061	1,156	2,217	21,166	18,541
	1933	11	11	2,636	884	3,520	13,876	10,077
	1934	7	830	2,453	420	2,873	29,718	24,200
	1935	13	29	1,794	201	1,995	73,351	57,960
	1936	12	12	1,000	104	1,240	14,653	12,325
South Australia	1932	2	3	109	4	113	970	664
	1933	1	1	50	..	50	100	90
	1934	1	1	44	..	44	11	17
	1935	3	5	340	..	340	2,463	1,557
	1936	1	1	101	..	101	505	400
Western Australia ..	1932	8	16	2,531	162	2,693	11,203	9,538
	1933	14	10	3,644	276	3,920	16,896	14,530
	1934	19	16	3,369	170	3,485	17,792	14,799
	1935	11	20	3,507	6	3,603	71,076	61,001
	1936	19	49	3,408	1,309	4,717	32,408	27,714
Tasmania ..	1932	2	4	1,163	..	1,163	15,562	6,516
	1933	1	1	75	..	75	1,200	1,050
	1934	..	..	..	..	..	..	..
	1935	1	1	70	4	74	148	91
	1936	4	4	369	6	375	3,713	3,212
Northern Territory ..	1932	1	3	177	..	177	354	304
	1933	1	1	21	8	29	87	125
	1934	1	1	18	2	20	240	240
	1935	1	1	4	..	4	128	100
	1936	1	1	32	8	40	1,200	900
Fed. Cap. Territory ..	1932	..	..	..	..	..	..	..
	1933	..	..	..	..	..	..	..
	1934	..	..	..	..	..	..	..
	1935	..	..	..	..	..	..	..
	1936	..	..	..	..	..	..	..
Australia ..	1932	127	372	29,329	3,588	32,917	212,318	165,582
	1933	90	195	26,988	3,125	30,113	111,956	95,048
	1934	155	1,061	46,963	3,895	50,858	370,386	317,859
	1935	183	257	44,813	2,509	47,322	495,124	390,596
	1936 (a)	235	320	57,118	3,469	60,587	497,248	468,825

(a) See footnote to Table on page 581.

Detailed information in regard to the disputes during the years 1932 to 1936 and previous years is given in the Labour Reports issued by this Bureau.

5. *Particulars of Principal Disputes in 1936.*—(i) *General.* The preceding tables show the number and effect of all disputes for the year 1936 classified according to Industrial Groups. Increases occurred in several of the principal groups during 1936 in respect of workpeople involved, and the number of working days and amount of wages lost. Of the total number of disputes no less than 73 per cent. were in connexion with the coal-mining industry, mostly in New South Wales. Wages lost in this industry in New South Wales were estimated at £226,618, or 48 per cent. of the total estimated loss of wages in Australia, viz., £468,825. Compared with earlier years there was no dispute of outstanding magnitude but particulars in the following paragraphs are given of the largest which occurred in the States mentioned.

(ii) *Interstate.*—(a) *General.*—Disputes which extend beyond the limits of a single State, while in some cases extensive, are comparatively few in number. These disputes rarely start on an interstate basis, but develop into such through the interdependence of trade union organizations. During the year 1936, no disputes of an interstate character occurred.

(b) *New South Wales.*—The dismissal of an employee was given as the cause of a dispute involving over 3,000 Ironworkers at Port Kembla in January, 1936. The Wollongong Citizens' Committee after several conferences with the employers and Union representatives effected a settlement, the terms of which were the reinstatement of the dismissed employee in another department, no victimization, and the granting of a conference to deal with the dispute. The stoppage extended over nine weeks.

A claim by the Theatrical Employees' Union for increased wages and shorter hours involved the Motion Picture Industry at Broken Hill in a dispute in January, 1936. A log of wages and hours served by the Union being rejected, the dispute was referred to the Broken Hill Industrial Council for negotiations. Conferences with the Proprietors resulted in a settlement granting increased wages and shorter hours. Work was resumed after a period of seven weeks' idleness.

A stoppage lasting eleven weeks occurred at the Wongawilli Coal Mine, Dapto, in February, 1936, the men alleging unnecessary delay in the supply of empty skips. Negotiations for a settlement were refused until work was resumed. Ultimately the employees undertook to resume work, on conditions applying immediately before the strike, pending a conference.

A log of increased wages and better conditions in the Trade, served on the Master Butchers' Association, Broken Hill, was given as the cause of a dispute in July, 1936. Extending over a period of eight weeks, it was subsequently settled by the Conciliation Commissioner in terms favourable to the employees.

Objection to the installation of an Electric Coal Cutting Machine was stated to be the cause of a stoppage at the Aberdare Central Colliery in July, 1936, the miners claiming it was unsafe, owing to the danger of explosion from trailing cables. A deputation representing the Coal Miners Federation interviewed the Minister for Mines, requesting a departmental inspection of the mine. The request was refused, but later permission to hold a public inquiry was granted under the Chairmanship of Commissioner J. P. Hindmarsh. After hearing evidence the Commissioner's report indicated the possibility of danger, and recommended that necessary precautions be taken by the management. On the understanding that these recommendations would be put into effect, the miners resumed work, after a period of twenty weeks idleness.

6. Duration of Industrial Disputes, 1936.—The following table gives particulars of industrial disputes during 1936 according to certain adopted limits of duration:—

INDUSTRIAL DISPUTES.—DURATION, AUSTRALIA, 1936.

Limits of Duration.	Number.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
		Directly.	Indirectly.	Total.		
1 day and less	89	20,378	845	21,223	21,223	£ 23,564
2 days and more than 1 day ..	37	9,175	403	9,578	19,150	20,382
3 days and more than 2 days ..	19	4,030	685	5,322	15,903	16,923
Over 3 days and less than 1 week (6 days)	33	8,252	545	8,797	38,170	38,853
1 week and less than 2 weeks ..	25	6,774	173	6,947	40,511	48,248
2 weeks and less than 4 weeks ..	16	2,884	424	3,308	53,261	46,705
4 weeks and less than 8 weeks ..	10	1,170	114	1,284	37,794	28,671
8 weeks and over	6	3,848	280	4,128	265,260	245,479
Total	235	57,118	3,469	60,587	497,248	468,825

(a) See footnote to Table on page 581.

7. Causes of Industrial Disputes, 1913 to 1936.—The following table shows the principal causes of the industrial disputes which occurred in 1913 and from 1931 to 1936:—

INDUSTRIAL DISPUTES.—CAUSES, AUSTRALIA.

Causes of Dispute.	1913.	1931.	1932.	1933.	1934.	1935.	1936.
NUMBER.							
1. Wages—							
(a) For increase	42	4	5	1	10	9	16
(b) Against decrease	4	17	11	4	3	5	1
(c) Other wage questions ..	31	16	26	14	31	44	48
2. Hours of Labour—							
(a) For reduction	3	2	2	..	..	..	1
(b) Other disputes re hours ..	7	..	..	7	6	2	4
3. Trades Unionism—							
(a) Against employment of non-unionists	8	1	2	1	4	4	4
(b) Other union questions ..	5	4	3	3	8	12	16
4. Employment of particular Classes or Persons	44	50	50	35	52	53	81
5. Working Conditions	51	22	11	9	25	40	43
6. Sympathetic	5	5	2	..	3	1	5
7. Other Causes	8	13	15	16	13	13	16
Total	208	134	127	90	155	183	(a) 235

WORKPEOPLE INVOLVED.

1. Wages—							
(a) For increase	8,633	2,053	1,295	29	7,210	2,161	2,014
(b) Against decrease	563	7,108	7,327	2,178	2,817	330	40
(c) Other wage questions ..	7,160	3,999	5,417	4,336	8,335	11,804	12,030
2. Hours of Labour—							
(a) For reduction	460	192	198	..	..	..	20
(b) Other disputes re hours ..	1,819	..	..	2,620	309	1,601	488
3. Trades Unionism—							
(a) Against employment of non-unionists	5,370	9	17	89	383	581	1,612
(b) Other union questions ..	1,415	2,240	501	705	2,184	2,537	4,011
4. Employment of particular Classes or Persons	11,370	12,023	12,556	11,803	15,638	11,497	22,078
5. Working Conditions	10,785	6,659	2,804	4,593	6,062	11,298	10,085
6. Sympathetic	947	1,053	316	..	1,045	22	1,062
7. Other Causes	1,758	2,331	2,486	3,850	6,875	5,487	4,447
Total	50,283	37,667	32,917	30,113	50,858	47,322	60,587

(a) See footnote to table on page 581.

INDUSTRIAL DISPUTES.—CAUSES, AUSTRALIA—*continued*.

Causes of Dispute,	1913.	1931.	1932.	1933.	1934.	1935.	1936.
WORKING DAYS LOST.							
1. Wages—							
(a) For increase ..	100,069	15,425	5,990	87	108,277	72,567	53,182
(b) Against decrease ..	9,438	111,258	123,571	17,431	55,459	1,621	10
(c) Other wage questions	78,183	43,746	17,631	18,736	40,219	73,020	32,000
2. Hours of Labour—							
(a) For reduction ..	2,774	152	2,894	..	1,748	48,878	..
(b) Other disputes re hours	15,111	..	..	8,895	..	..	..
3. Trade Unionism—							
(a) Against employment of non-unionists ..	91,002	99	59	89	3,263	2,615	..
(b) Other union questions	32,388	11,752	6,261	1,421	10,774	11,696	..
4. Employment of particular Classes or Persons ..	191,723	38,567	36,054	31,799	110,166	144,453	..
5. Working Conditions ..	73,562	17,106	14,902	22,865	26,223	64,612	..
6. Sympathetic ..	24,066	4,070	1,096	..	11,174	44	..
7. Other Causes ..	5,212	3,816	3,860	10,633	23,083	75,618	..
Total ..	623,528	245,991	212,318	111,956	370,386	495,124	497,248

The main causes of industrial disputes are "Wage" questions, "Working Conditions," and "Employment of Particular Classes or Persons." In each of the years 1913 to 1925, with the exception of 1922, the number of dislocations concerning wages exceeded those caused by any other question, and varied between a minimum proportion of 26 per cent. in 1922 and a maximum of 45 per cent. in 1916. Since 1929 the number of disputes concerning "Wages" has averaged approximately 30 per cent. of the total number for each year. The majority of the dislocations of work classified under the heading, "Employment of Particular Classes or Persons," are stoppages for the purpose of protesting against the dismissal of certain employees, who, in the opinion of their fellow-workers, have been unfairly treated or victimized. This class of dispute occurs very frequently in the coal-mining industry, and has been the principal cause of industrial disturbance in recent years. The number of disputes over "Trade Union" questions has represented a fairly uniform proportion of the total number of disputes during the years under review, while stoppages of work concerning "Hours of Labour" increased during 1926 and 1927, but have been relatively unimportant during recent years.

S. Results of Industrial Disputes.—The results of industrial disputes during each of the past six years are given in the following table :—

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO RESULTS.—AUSTRALIA.

Year.	Number.				Workpeople Involved.				Working Days Lost.			
	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.
1931..	27	80	25	..	5,917	26,182	5,406	..	47,191	142,006	49,222	..
1932..	29	77	21	..	5,437	17,518	9,962	..	23,572	48,893	139,853	..
1933..	17	58	13	1	4,778	20,697	4,361	213	12,301	84,697	14,468	426
1934..	29	102	14	9	7,025	31,220	9,620	2,729	40,048	179,126	126,081	19,059
1935..	44	105	17	15	9,312	30,338	4,359	3,179	67,933	346,666	62,007	10,194
1936a	44	105	7	19	13,997	40,279	908	5,493	248,363	179,748	7,027	62,110

(a) See footnote to table on page 581.

9. **Methods of Settlement.**—The following table gives a classification of the methods of settlement according to the adopted schedule:—

INDUSTRIAL DISPUTES.—METHODS OF SETTLEMENT, AUSTRALIA.

Methods of Settlement.	1913.	1931.	1932.	1933.	1934.	1935.	1936. (a)
NUMBER.							
Negotiations—							
Direct between employers and employees or their representatives	119	88	87	64	84	130	171
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act	17	3	4	1	2	3	10
Under State Industrial Acts—							
By intervention, assistance, or compulsory conference ..	19	11	5	3	10	7	3
By reference to Board or Court ..	22	1	2	3	9	6	6
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	4	4	3	2	5	5	2
By filling places of workpeople on strike or locked out ..	13	2	7	2	2	8	4
By closing-down establishment permanently	1	2	1	3	2	4	..
By other methods	13	21	18	11	40	18	30
Total	208	132	127	89	154	181	(a) 235

WORKPEOPLE INVOLVED.

Negotiations—							
Direct between employers and employees or their representatives	23,357	22,292	22,595	19,703	25,469	30,360	44,251
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act	3,172	1,885	1,800	1,100	891	285	5,001
Under State Industrial Acts—							
By intervention, assistance, or compulsory conference ..	6,505	3,871	1,640	1,290	4,559	3,867	291
By reference to Board or Court ..	12,774	42	410	1,360	1,666	1,115	1,777
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	659	1,083	1,839	1,096	4,335	2,017	339
By filling places of workpeople on strike or locked out ..	658	222	460	986	138	3,670	141
By closing-down establishment permanently	170	52	11	1,271	444	108	..
By other methods	2,988	8,058	4,156	3,213	13,092	5,436	8,758
Total	50,283	37,505	32,917	30,049	50,594	47,188	60,587

WORKING DAYS LOST.

Negotiations—							
Direct between employers and employees or their representatives	94,400	109,601	87,650	54,774	182,260	129,903	234,373
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act	26,335	2,625	79,872	6,600	20,019	3,211	202,049
Under State Industrial Acts—							
By intervention, assistance, or compulsory conference ..	187,871	25,257	7,123	3,510	58,801	117,762	3,047
By reference to Board or Court ..	221,769	252	3,408	6,330	10,474	10,001	21,503
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	2,105	30,317	18,596	15,437	46,814	24,601	7,152
By filling places of workpeople on strike or locked out ..	14,139	27,042	6,874	10,543	138	74,873	2,581
By closing-down establishment permanently	20,400	5,355	44	8,627	4,486	7,546	..
By other methods	56,509	37,970	8,451	6,071	41,322	48,943	22,043
Total	623,528	238,419	212,318	111,892	364,314	486,800	497,248

(a) See footnote to Table on page 581.

The majority of disputes are settled by direct negotiations between employers and employees, the proportion so settled since 1913 ranging between 43 per cent. in 1925 and 75 per cent. in 1930. Of the 235 disputes settled during 1936, 174 or 74 per cent. were settled by this method. The proportion of dislocations settled by compulsory conferences or the intervention and assistance of officials under State or Commonwealth Arbitration Acts has varied considerably during the period under review, ranging from 3 per cent. in 1915 to 22 per cent. in 1913. The proportion in 1936 was 5 per cent. In connexion with the comparatively large number of disputes which are classified as having been settled "By other methods," many stoppages of work occur each year, principally at collieries, but the cause of such stoppages is not officially known to the employers or their representatives. Such stoppages usually last for one day, and work is resumed without negotiations for a settlement of the trouble.

§ 2. Fluctuations in Employment.

1. *General.*—The particulars given in the following tables are based upon information furnished by the secretaries of trade unions. The membership of the unions regularly reporting exceeds 440,000. Unemployment returns are not collected from unions the members of which are in permanent employment, such as railway and tramway employees, and public servants, or from unions whose members are casually employed (wharf labourers, etc.). Very few of the unions pay unemployment benefit, but the majority of the larger organizations have permanent secretaries and organizers who are closely in touch with the members and with the state of trade within their particular industries. In many cases unemployment registers are kept, and provision is made in the rules for payment of reduced subscriptions by members out of work. In view of these facts, and of the large membership of the unions from which quarterly returns are received, the percentages of unemployment derived from Trade Union returns may be regarded as of value by virtue of the indication they give of the relative intensity of unemployment from time to time, and it is believed that they can be taken as a rough index of the percentage of workers unemployed at any time. Seasonal fluctuations in unemployment have been provided for by collecting returns quarterly since the 1st January, 1913, the yearly figures quoted representing the average of the four quarters.

2. *Unemployment.*—(i) *States.* In addition to the qualifications referred to above, allowance must be made for the circumstance that the industries included in the returns from trade unions are not quite identical in the various States. The results may, however, be taken as representing fairly well labour conditions generally:—

UNEMPLOYMENT.—1936.

State.	Unions Reporting.		Unemployed.	
	Number.	Members.	Number.	Percentage.
New South Wales	112	191,598	29,537	15.4
Victoria	81	118,143	12,653	10.7
Queensland	45	60,639	4,751	7.8
South Australia	58	33,926	3,658	10.8
Western Australia	63	28,335	2,296	8.1
Tasmania	33	8,670	1,097	12.7
Australia	392	441,311	53,992	12.2

(ii) *Summary for Australia.* The following table gives a summary for Australia for the last five years and quarterly for the years, 1933 to 1936. Particulars of unemployment percentages in 1937 will be found in the Appendix :—

UNEMPLOYMENT.—AUSTRALIA.

Period.			Unions.	Membership.	Unemployed.	
					Number.	Percentage.
1932	Year	.. ..	395	415,434	120,454	29.0
1933	"	.. ..	394	415,305	104,035	25.1
1934	"	.. ..	394	424,035	86,865	20.5
1935	"	.. ..	396	435,938	71,823	16.5
1936	"	.. ..	392	441,311	53,992	12.2
1933	March Quarter	.. ..	394	412,674	109,182	26.5
	June "	.. ..	394	415,559	106,652	25.7
	September "	.. ..	394	416,426	104,560	25.1
	December "	.. ..	394	416,560	95,745	23.0
1934	March "	.. ..	394	422,056	92,297	21.9
	June "	.. ..	394	422,113	88,413	20.9
	September "	.. ..	394	425,104	86,652	20.4
	December "	.. ..	396	426,866	80,097	18.8
1935	March "	.. ..	396	433,116	80,548	18.6
	June "	.. ..	397	433,254	77,177	17.8
	September "	.. ..	395	438,216	69,375	15.9
	December "	.. ..	395	439,165	59,992	13.7
1936	March "	.. ..	395	445,294	59,621	13.4
	June "	.. ..	394	446,564	57,001	12.8
	September "	.. ..	390	436,139	52,482	12.0
	December "	.. ..	390	437,246	46,863	10.7

NOTE.—Similar figures for each of the four quarters of the years since 1912 will be found in the Labour Reports. The quarterly figures show the number of persons who were out of work for three days or more during a specified week in each quarter, and the annual figures, the average of the four quarters; the returns do not include persons out of work through strikes or lock-outs.

The highest percentage of unemployed yet recorded (30.0) was reached in the quarter ended June, 1932.

(iii) *Percentages in States.* The following table gives the percentages in each State from 1932 to 1936 :—

UNEMPLOYMENT.—PERCENTAGES.

Period.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
		%	%	%	%	%	%	%
1932	Year	32.5	26.5	18.8	34.0	29.5	26.4	29.0
1933	"	28.9	22.3	15.3	29.9	24.8	19.1	25.1
1934	"	24.7	17.4	11.7	25.6	17.8	17.9	20.5
1935	"	20.6	14.0	8.7	17.6	13.4	15.9	16.5
1936	"	15.4	10.7	7.8	10.8	8.1	12.7	12.2
1934	March Quarter	25.8	18.6	13.7	28.5	19.5	17.7	21.9
	June "	25.0	18.0	12.7	25.4	18.3	17.9	20.9
	Sept. "	24.5	17.5	11.4	25.4	17.2	18.9	20.4
	Dec. "	23.5	15.3	9.1	23.0	16.3	17.0	18.8
1935	March "	23.6	15.0	9.8	20.7	15.4	16.7	18.6
	June "	22.7	15.0	8.8	18.9	13.9	16.4	17.8
	Sept. "	19.1	14.8	8.5	16.3	12.5	16.7	15.9
	Dec. "	17.0	11.3	7.7	14.7	11.8	13.7	13.7
1936	March "	17.2	10.8	8.5	12.2	10.3	11.1	13.4
	June "	16.2	10.6	8.5	11.0	9.2	12.7	12.8
	Sept. "	14.8	11.7	7.2	10.0	7.4	14.0	12.0
	Dec. "	13.3	9.7	7.2	9.0	5.6	12.9	10.7

(iv) *Industrial Groups. Australia.* The next table shows the percentages unemployed in industrial groups. Industries or occupations in which employment is stable, such as railways, and those which are subject to exceptional fluctuations, such as wharf labour, agricultural, pastoral, etc., are not included. Other occupations—domestic, hotel employees, etc., are included in the "Other and Miscellaneous" group, as their returns are not sufficiently representative:—

UNEMPLOYMENT IN INDUSTRIAL GROUPS.—AUSTRALIA, 1936.

Industrial Group.	Number Reporting.		Unemployed.	
	Unions.	Members.	Number.	Percentage.
Manufacturing:—				
I. Wood, Furniture, etc. ..	16	18,109	1,953	10.6
II. Engineering, Metal Works, etc. ..	62	76,085	7,391	9.7
III. Food, Drink, Tobacco, etc. ..	53	37,919	6,884	18.2
IV. Clothing, Hats, Boots, etc. ..	20	39,922	5,977	12.7
V. Books, Printing, etc. ..	13	19,131	1,212	6.4
VI. Other Manufacturing ..	65	44,957	5,124	11.4
VII. Building	47	52,479	6,407	12.2
VIII. Mining, Quarrying, etc. ..	20	25,689	5,649	21.9
X. Land Transport other than Railway and Tramway Services ..	12	17,575	2,388	13.6
IX., XI., XII., XIII., and XIV. Other and Miscellaneous ..	84	109,445	11,907	10.9
All Groups	392	441,311	53,992	12.2

3. *Seasonal Employment in Australia.*—An investigation concerning the extent of seasonal employment in Australia was made during 1929. The State Statisticians were requested to furnish brief reports regarding the industries and callings in their respective States subject to seasonal fluctuations. From the reports received from these officials, supplemented by information from other sources, particulars were compiled and published in Official Year Book, No. 22, and in Labour Report, No. 19.

4. *Direct Measures of Employment.*—(i) *General.* In order to supplement the Trade Union Unemployment percentages, the Commonwealth and the State Statisticians have for the last four years been making direct monthly collections of employment in factories and retail stores. In the case of factories, these figures give fairly reliable indexes of the course of employment fully a year before the results of the annual collections become available. In the case of retail stores, the figures yield an index of employment where none existed before. These indexes are published quarterly in mimeographed statements, and now, after their reliability has been proved over several years, they are included here for the first time.

(ii) *Index of Employment in Factories.* This index is available monthly from July, 1933. "Factories" include all industrial establishments in which four or more hands are employed, or in which power other than hand is used. The index relates to employees on the pay roll on the pay day nearest to the 15th of the month, and includes managers, overseers, clerks and all workers except working proprietors and those engaged solely in the delivery and sale of goods. The index shows that about 23 per cent. of the employee population was employed in "factories" in June, 1937.

Up to June, 1936, the index is based on the results of annual factory censuses and actual mid-monthly factory employment of all persons is published in the Production Bulletin issued by the Bureau. For the year 1936-37 the index is based on returns from selected representative factories, and is issued subject to subsequent revision. Index-numbers for later months, estimated in the same way, may be obtained from quarterly

press notices on employment issued by the Bureau. The number of these "sample" factories and their employees as a percentage of all factory employees in the year 1935-36 are shown at the foot of the table.

For the last three columns of the table the Australian index of employment has been divided by an index of employee population in order to compare the change in employment in factories with the change in the number of persons seeking employment generally. The indexes of employee population are based on the numbers of males and females aged 16 to 64 inclusive. These are found by applying vital and migration statistics to the numbers of males and females at varying ages at the Census date. The total index is obtained by taking a mean of the individual indexes weighted by the numbers of males and females in the employee group (wage and salary earners, unemployed, apprentices, and helpers) at the census of June, 1933. This gives males about three times the weight of females. Between 1928-29 and 1935-36 employee population as estimated in this way increased: males, 8.8 per cent.; females, 10.9 per cent.; total, 9.3 per cent. The increase of population of all ages over the same period was: males, 5.4 per cent.; females, 7.2 per cent.; total, 6.3 per cent. The difference is due to the fact that the average age of the Australian population is increasing.

The index of total factory employment, divided by the index of employee population, fluctuated between 100 and 105 from 1925-26 to 1928-29 (the base year); fell to 71 in 1931-32; and rose to 100 and 104 in 1935-36 and 1936-37 respectively. Thus there has been a full return to the pre-depression level of factory employment, but there is as yet no evidence of the growth of factory employment at the expense of other occupations.

There have been changes in the distribution of factory employment. Thus female factory employment began to increase in 1931-32, a year sooner than male employment, and between 1928-29 and 1935-36 it had increased by 7 per cent. more than male employment, after allowing for the growth of employee population. The returns from the "sample" factories indicate that this difference must have been very considerably reduced during 1936-37. Also, in both Queensland and Western Australia, by 1935-36 total employment had fallen behind the average Australian level by about 9 per cent. of its amount in 1928-29, while in Victoria it had gone ahead by about 8 per cent.

(iii) *Index of Employment in Retail Stores.* This index is not available even annually before July, 1933. It is based on employment in the number of establishments shown at the foot of the table. As there is no annual census of employment in retail stores, there is no means of knowing how accurately the movement of employment in these stores represents the whole field. Consequently this index is much less reliable than the index of employment in factories. The Australian index is an average of the State indexes weighted by the number of persons returned as engaged in "Commerce" in the June, 1933 census. This census industry class "Commerce" comprises both wholesale and retail dealing, and it is not possible to obtain separate figures for the latter. The numbers returned in the census as in the employee group in this class were, for Australia: males, 212,000; females, 87,000; total, 299,000. The respective percentages returned as totally unemployed in this group were: males, 18.1 per cent.; females, 10.6 per cent.; total 15.9 per cent. In addition there was a good deal of part-time work.

The 21 per cent. increase in retail employment between July, 1933, and June, 1937, after correcting for growth of employee population, may be compared with the increase of 38 per cent. in the corresponding index of factory employment over the same period. However, unemployment in the census class "Manufacturing" was 22.1 per cent. compared with 15.9 per cent. quoted above, for "Commerce". In either case the increase in employment has been roughly sufficient to absorb those returned as unemployed and working part-time at the census as well as the proportion of the normal growth of employee population ordinarily seeking employment in these classes.

(iv) *General Employment Indexes of New South Wales and Queensland.* The New South Wales Index is published by the Government Statistician of New South Wales, and fuller details may be found in the *New South Wales Year Book*. It refers to all wage and salary earners, and is based on the census record of employment at June, 1933, and receipts of wages tax and records of Government employment since that date.

The Queensland Index is published by the Queensland Bureau of Industry and fuller details may be found in the *Queensland Year Book*. It refers to adult male wage and salary earners and is based on the receipts of the unemployment insurance fund. Normal seasonal variation does not appear in the index.

Both indexes give an almost complete record of employment, and are the most accurate indexes available in Australia. In both indexes, however, relief workers present a difficult problem. It is impossible to separate entirely "normal" lean works and relief works. Thus for the purposes of these indexes "relief workers" mean "part-time relief workers" in the case of New South Wales and "intermittent relief workers" in the case of Queensland.

MONTHLY INDEX OF EMPLOYMENT IN FACTORIES.

(Base : Average for Year 1928-29 = 100.)

Period.	New South Wales.			Victoria.			Queensland.			South Australia.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Number of Em- ployees (a) ..	129.5	44.6	174.1	98.1	51.2	149.3	35.6	7.8	43.4	29.0	6.4	35.4
1925-26 ..	94	91	93	97	91	95	109	95	106	107	106	109
1926-27 ..	100	98	99	102	99	101	101	89	99	113	109	112
1927-28 ..	99	97	98	100	98	99	101	92	99	106	106	106
1928-29 ..	100	100	100	100	100	100	100	100	100	100	100	100
1929-30 ..	90	91	90	96	98	96	95	94	94	87	89	87
1930-31 ..	68	75	70	78	83	80	83	85	84	63	71	64
1931-32 ..	66	79	69	77	90	81	78	84	80	61	76	64
1932-33 ..	73	86	76	87	101	92	80	92	82	68	84	71
1933-34 ..	82	94	85	96	107	100	86	99	88	77	89	80
1934-35 ..	93	107	97	105	113	108	92	105	94	89	97	91
1935-36 ..	104	116	107	117	119	117	97	110	90	104	110	108
1936-37 (b) ..	(c)	(c)	115	122	118	121	104	113	100	111	111	111
1935—												
July ..	99	108	101	109	111	110	97	104	98	99	102	100
August ..	100	111	103	110	115	112	99	110	101	97	105	99
September ..	101	114	104	113	118	115	98	113	101	101	109	102
October ..	103	117	106	116	120	117	101	114	101	103	109	104
November ..	105	119	108	118	121	119	102	115	104	102	108	103
December ..	105	119	109	118	120	119	98	112	101	104	110	105
1936—												
January ..	104	111	105	116	115	115	89	104	92	103	106	104
February ..	(d)104	118	(d)107	119	122	120	92	108	95	107	116	109
March ..	(d)105	122	(d)110	122	125	123	95	112	98	110	117	111
April ..	106	120	109	120	120	120	95	109	97	110	114	111
May ..	108	120	111	120	120	120	98	110	100	109	112	109
June ..	108	119	110	118	117	118	100	105	101	105	107	105
Number of Factories in Sample ..	1,901			100			150			114		
Percentage of Employees (e) in Sample in 1935-36 ..	86 (f)			21			47			54		

For Footnotes see next page.

MONTHLY INDEX OF EMPLOYMENT IN FACTORIES—continued.

(Base: Average for Year 1928-29 = 100.)

Period.	Western Australia.			Tasmania.			Australia.			Australia divided by Index of Employee Population.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Number of Em- ployees (a) ..	16.0	3.8	19.8	7.7	2.3	10.0	315.9	116.1	432.0	..	..	..
1925-26 ..	104	86	100	101	84	97	99	92	97	106	98	103
1926-27 ..	95	91	94	105	88	101	101	98	100	106	102	105
1927-28 ..	98	97	98	107	104	106	100	98	100	102	100	102
1928-29 ..	100	100	100	100	100	100	100	100	100	100	100	100
1929-30 ..	94	98	94	105	99	104	92	95	93	91	93	92
1930-31 ..	68	76	69	85	83	84	73	79	75	71	76	72
1931-32 ..	61	75	63	84	87	85	70	84	74	68	80	71
1932-33 ..	68	81	70	86	90	87	78	93	82	74	87	77
1933-34 ..	75	85	77	93	80	92	86	99	90	81	92	84
1934-35 ..	83	92	85	101	97	100	96	108	100	89	99	92
1935-36 ..	98	107	100	112	103	110	107	116	109	98	105	100
1936-37 (b) ..	105	108	106	118	101	114	114	118	115	104	105	104
1935—												
July ..	93	100	94	104	98	103	102	108	104	94	98	95
August ..	93	101	95	105	94	102	103	112	105	95	101	97
September ..	95	104	97	106	93	103	104	115	107	96	104	98
October ..	98	105	99	109	96	106	106	117	109	98	106	100
November ..	100	108	101	113	98	109	109	118	111	100	107	102
December ..	101	108	102	116	104	113	108	118	111	100	106	102
1936—												
January ..	100	105	101	117	104	114	106	112	107	97	101	98
February ..	102	105	102	119	122	120	108	119	111	99	107	101
March ..	103	107	104	119	116	118	110	122	113	101	110	103
April ..	103	108	104	115	105	113	110	118	112	100	106	102
May ..	103	108	104	114	105	112	110	119	113	101	106	103
June ..	102	107	103	113	103	111	110	116	111	100	104	101
Number of Factories in Sample ..		92			49			2,406			2,406	
Percentage of Employees (c) in Sample in 1935-36 ..		33			60			53			53	

(a) Number of employees in the base year, 1928-29 ('000), exclusive of working proprietors and those engaged solely on the delivery and sale of goods.

(b) For 1936-37 indexes are based on sample returns, and will be revised. The indexes of total employment are based on total employment in sample factories. The male and female indexes are based on separate returns for males and females in a State (excluding New South Wales) adjusted so that the total of males and females agrees with the estimate of total employment.

(c) Not available.

(d) Industrial dispute involving about 3,000 men.

(e) The samples vary in quality, so these percentages are intended to give only a very rough idea of the relative accuracy of the estimates. Tasmania and South Australia have proved less and Victoria more accurate than the relative size of the samples would suggest.

(f) Percentage in enlarged sample collected for last 4 months of year only.

MONTHLY INDEX OF EMPLOYMENT IN RETAIL STORES.

(Base : July, 1933 = 100.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.	Australian Index divided by Index of Employee Population.
1933—								
July ..	100	100	100	100	100	100	100	100
August ..	97	99	99	102	93	101	98	98
September ..	99	101	97	102	93	98	99	99
October ..	99	103	97	99	93	109	100	100
November ..	102	111	100	100	96	108	104	104
December ..	113	121	110	108	106	115	114	114
1934—								
January ..	102	109	100	103	108	109	105	104
February ..	104	108	99	102	99	105	104	103
March ..	104	109	100	102	98	107	104	104
April ..	103	108	100	103	100	105	104	103
May ..	105	108	102	105	101	105	105	104
June ..	105	109	103	104	100	105	106	104
Average 1933-34	103	107	101	102	99	106	104	103
1934—								
July ..	108	109	104	106	104	107	107	106
August ..	105	109	103	102	102	105	105	104
September ..	107	110	103	103	100	106	107	105
October ..	108	115	104	108	104	104	109	108
November ..	110	122	105	107	104	107	112	111
December ..	123	131	116	118	119	119	124	122
1935—								
January ..	109	117	106	108	109	110	111	109
February ..	112	117	106	107	103	108	112	110
March ..	109	118	105	107	105	107	111	109
April ..	111	117	105	108	103	107	111	109
May ..	112	121	106	109	106	107	113	111
June ..	112	123	105	111	107	106	114	112
Average 1934-35	111	118	106	108	105	108	112	110
1935—								
July ..	116	120	107	107	111	109	115	112
August ..	113	120	108	109	105	108	113	111
September ..	113	123	104	113	106	107	114	112
October ..	115	128	107	112	106	107	117	114
November ..	119	131	106	115	109	110	120	117
December ..	133	145	106	128	123	120	133	130
1936—								
January ..	116	132	109	116	114	115	120	116
February ..	119	133	107	114	110	111	120	117
March ..	117	132	109	113	110	111	119	116
April ..	118	129	108	114	109	113	119	115
May ..	119	132	110	114	111	112	121	117
June ..	120	132	110	113	109	113	121	117
Average 1935-36	118	130	109	114	110	112	119	116

MONTHLY INDEX OF EMPLOYMENT IN RETAIL STORES—*continued.*

(Base: July, 1933 = 100.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.	Australian Index divided by Index of Employee Population.
1936—								
July ..	122	130	100	110	113	107	121	117
August ..	120	128	109	115	111	113	120	116
September ..	120	128	109	118	113	115	120	116
October ..	121	133	110	112	110	116	122	118
November ..	123	139	111	115	116	119	125	121
December ..	137	155	121	125	127	132	138	133
1937—								
January ..	123	138	112	112	116	120	125	120
February ..	125	137	111	111	114	122	125	120
March ..	123	135	111	111	114	118	123	118
April ..	124	136	109	113	114	120	124	119
May ..	126	138	111	114	113	121	126	120
June (a) ..	126	141	110	114	113	121	126	121
Average 1936-37	124	137	111	115	115	119	125	120

Number of Establishments now furnishing Returns ..

599 102 120 35 69 14 939 ..

(a) Indexes for later months may be obtained from quarterly press notices on employment, issued by the Bureau.

NEW SOUTH WALES—EMPLOYMENT AND UNEMPLOYMENT OF ALL AVAILABLE WAGE AND SALARY EARNERS.

Percentage of all who are dependent on and available for employment.

Period.	(a) Including as employed the full time equivalent of part time and casual workers.		(b) Including all part-time retail workers as unemployed.	
	Employed.	Unemployed.	Employed.	Unemployed.
1933—June (Census) ..	74.4	25.6	73.5	26.5
1933-34	78.1	21.9	76.1	23.9
1934-35	84.4	15.6	81.8	18.2
1935-36	89.5	10.5	87.1	12.9
1936-37	92.9	7.1	91.4	8.6
1936—June	90.4	9.6	88.2	11.8
1937—				
January	92.1	7.9	90.8	9.2
February	93.3	6.7	91.8	8.2
March	93.2	6.8	91.9	8.1
April	93.7	6.3	92.4	7.6
May	94.3	5.7	93.0	7.0
June	94.7	5.3	93.5	6.5
July	95.0	5.0	93.8	6.2

The indexes have been adjusted to allow for an estimated increase of 1.2 per cent. per annum in the number of persons dependent on employment. At the Census of 30th June, 1933, 15,142 persons dependent on employment returned themselves as unemployed by reason of illness, accident, etc., or "voluntarily". This number, representing 1.8 per cent. of all persons dependent on employment, is excluded from the above indexes, which relate to percentages of available wage-earners employed and unemployed. The approximate number of persons in private employment was 478,000 in June, 1933; 519,000 in June, 1934; 567,000 in June, 1935; 614,000 in June, 1936; and 653,000 in June, 1937.

QUEENSLAND—EMPLOYMENT AND UNEMPLOYMENT AMONG MEN WAGE AND SALARY EARNERS.

Period.	(a) Including as employed the full-time equivalent of "intermittent relief workers."		(b) Including "intermittent relief workers" as unemployed.	
	Employed.	Unemployed.	Employed.	Unemployed.
	%	%	%	%
1929	89.9	10.1	89.9	10.1
1930	86.4	13.6	85.6	14.4
1931	77.2	22.8	74.3	25.7
1932	77.8	22.2	72.9	27.1
1933	79.8	20.2	73.9	26.1
1934	84.9	15.1	80.1	19.9
1935	89.0	11.0	84.4	15.6
1936	92.3	7.7	87.4	12.6
3 months ended—				
1936—				
March	91.0	9.0	85.5	14.5
June	91.8	8.2	86.4	13.6
September	94.7	5.3	89.9	10.1
December	91.9	8.1	88.1	11.9
1937—				
January	92.7	7.3	88.8	11.2
February	91.8	8.2	87.8	12.2
March	91.4	8.6	87.8	12.2
April	93.6	6.4	90.0	10.0
May	94.0	6.0	90.3	9.7
June	94.3	5.7	90.5	9.5
July	94.5	5.5	90.7	9.3

The above table is in terms of full-time employment and unemployment. Normal seasonal variation is excluded. Allowance has been made for an estimated annual increase of 1.5 per cent. in the number of men dependent on employment. The approximate number of men in employment in 1936, excluding relief workers, was 160,310.

5. **Special Legislation for the Relief of Unemployment**—The position in regard to unemployment in Australia became so serious during 1930 that the usual methods of providing funds for relief works and sustenance were found to be inadequate. The cessation of loans, and the general depression in industry and business, due mainly to the decline in the prices of primary products, brought about an economic crisis in all States. The number of persons thrown out of work increased rapidly, with little prospect of conditions improving during the immediate future. The Commonwealth and State Governments realized that special action was necessary to provide additional funds to relieve the distress caused by continued unemployment, as the money ordinarily available was not sufficient to meet the abnormal conditions.

Special grants to the States were made by the Commonwealth Government, while special legislation relating to the relief of unemployment was enacted in practically all the States. In New South Wales, Victoria and Queensland, the Acts provided for special

taxation for the purpose of creating funds for relief works and sustenance for the unemployed. The funds necessary for the relief of unemployment in South Australia, Western Australia and Tasmania were provided from Revenue.

Further references to the special legislation relating to unemployment, rates of tax and sustenance payments will be found in Labour Reports, Nos. 22 to 27.

§ 3. Apprenticeship.

In Year Book No. 16, pp. 602-3, was given particulars of legislation relating to the question of apprenticeship. Tables were included showing the periods of apprenticeship fixed in the awards of the various industrial tribunals of the States and Commonwealth, also the proportion of apprentices to journeymen and journeywomen. This information has been omitted from the present issue. Reference to legislation covering apprenticeship will be found in the Appendix to Official Year Book, No. 23.

D.—ASSOCIATIONS.

§ 1. Labour Organizations.

1. *Registration.*—(i) *Under Trade Union Acts.* The benefits obtained by registering trade unions under the Trade Union Acts in force in the various States are not considered of much value; consequently the statistics of registered trade unions of employees do not accurately represent the position of unionism. Further, the returns for past years are so defective as to be practically valueless, inasmuch as no reliable indication is afforded of the numerical and financial position of the unions. Some of the registered unions fail to supply returns; this non-supply may lead to cancellation of the registration. Others have obtained the cancellation of their certificates of registration, the apparent reason being that they proposed to register under the Commonwealth Conciliation and Arbitration Act or a State Arbitration Act. In Queensland, some of the largest labour unions withdrew from registration during 1911, mainly on account of the necessity for closer restriction of their objects as set forth in their rules, consequent on legal decisions affecting trade unions. In Victoria and in South Australia very few of the existing unions are registered under the Trade Union Acts. It will be seen, therefore, that the available information under this heading is too meagre for statistical purposes.

(ii) *Under Industrial Arbitration Acts.* Information with regard to registrations of employers' associations and trade unions under the various State Industrial Arbitration Acts will be found in previous issues of the Year Book. The latest information available as to registrations is as follows:—New South Wales, 171 industrial unions of employers and 156 industrial unions of employees, the membership not being available in either case; Queensland, 12 industrial unions of employers with 11,790 members, and 77 industrial unions of employees with approximately 160,341 members; South Australia, 27 organizations of employees with 18,754 members; Western Australia, 32 organizations of employers with 865 members, and 137 organizations of employees with 43,973 members. There is no provision in the South Australian Industrial Acts for the registration of organizations of employers, and in Victoria and Tasmania, where Wages Board systems of wage fixation are in operation, organizations of employers and employees are not required to register. Registration under Commonwealth legislation began in 1906. In that and the four years following, there was but one union of employers; another was registered in 1911. The unions of employees registered were 20 in 1909, with 41,413 members. On 31st December, 1936, there were 30 registered organizations of employers and 138 registered organizations of employees, with a total estimated membership for the latter of 680,000.

2. *Particulars regarding Trade Unions.*—(i) *Types.* The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization, which, in its turn, may be merely a branch of a British or International union. Broadly speaking, there are four distinct classes of labour

organizations:—(i) the local independent; (ii) the State; (iii) the interstate; and (iv) the Australasian or International; but a number of variations occur from each of these classes. The leading characteristics of each of these types were briefly outlined in Labour Report No. 2 (pp. 7 to 9) issued by this Bureau.

(ii) *Number and Membership.* As already stated, the figures for trade unions registered under the Acts do not represent the position of unionism in Australia. In 1912 the Labour and Industrial Branch of the Commonwealth Bureau of Census and Statistics was established and with the cordial co-operation of the officials of the labour organizations comprehensive figures relating to the development of organized labour are now available. The following table shows the position at the end of 1936:—

TRADE UNIONS, BRANCHES AND MEMBERS, 1936.

State or Territory.				Number of Separate Unions.	Number of Branches.	Number of Members.
New South Wales	..	..	..	184	559	315,517
Victoria	..	..	..	147	396	201,610
Queensland	..	..	..	111	314	158,953
South Australia	..	..	..	114	177	59,900
Western Australia	..	..	..	132	211	60,762
Tasmania	..	..	..	76	71	15,839
Northern Territory	..	..	..	5	..	992
Federal Capital Territory	..	..	..	15	I	1,230
Total	..	..	..	784	1,729	814,809
Australia (a)	..	..	..	350 (a)	2,157 (b)	814,809

(a) Allowing for interstate duplication. The figures represent the number of distinct organizations and interstate groups of organizations in Australia—not the total number of organizations which are practically independent and self-governing.

(b) See remarks below.

In the preceding table the number of separate unions in each State refers to the number of unions which are represented in each State, exclusive of branches therein, and each union is counted once only. Except in the last line, the number of branches indicates the number of branches of State head offices, which may, of course, themselves be branches of an interstate or larger organization. In taking the total number of separate unions in Australia (*see* last line but one), it is obvious that, in the case of interstate and similar unions, there will be duplication, since each such union is counted once in each State in which it has any branches. In the figures given in the last line, allowance has been made for this duplication. State branches of interstate or federated unions, as well as sub-branches within a State, are included under the heading "Branches" in the third column—last line. The scheme of organization of these interstate or federated unions varies greatly in character, and the number of separate Commonwealth unions does not, therefore, fairly represent the number of practically independent organizations in Australia. In some of these unions the State organizations are bound together under a system of unification and centralized control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes. There are, therefore, 350 distinct organizations and interstate groups of organizations in Australia, having 2,157 State branches and sub-branches, and a total of 814,809 members.

(iii) *Classification in Industrial Groups.* The following table shows the number of unions and members thereof in Australia at the end of each of the last five years. The number of unions specified refers to the number of different unions represented in each

State; and, while interstate or federated unions are counted once in each State in which they are represented, sub-branches within a State are not counted:—

TRADE UNIONS.—INDUSTRIAL GROUPS, AUSTRALIA.

Industrial Groups.	1932.	1933.	1934.	1935.	1936.
NUMBER OF UNIONS.					
Manufacturing:—					
I. Wood, Furniture, etc.	18 (a)	18 (a)	17 (a)	17 (a)	17 (a)
II. Engineering, Metal Works, etc.	63 (23)	63 (23)	63 (23)	61 (21)	61 (21)
III. Food, Drink, Tobacco, etc.	63 (34)	62 (34)	62 (32)	63 (32)	69 (33)
IV. Clothing, Hats, Boots, etc.	24 (12)	24 (11)	24 (11)	24 (11)	24 (11)
V. Books, Printing, etc.	15 (10)	15 (10)	15 (9)	15 (9)	14 (8)
VI. Other Manufacturing	77 (37)	77 (37)	76 (36)	73 (34)	71 (34)
VII. Building	51 (28)	51 (28)	51 (28)	49 (26)	49 (27)
VIII. Mining, Quarrying, etc.	16 (13)	16 (13)	17 (14)	16 (13)	16 (13)
IX. Railway and Tramway Services	51 (29)	51 (29)	51 (29)	52 (30)	50 (28)
X. Other Land Transport	11 (4)	11 (4)	10 (4)	10 (4)	11 (4)
XI. Shipping, etc.	57 (24)	55 (22)	55 (22)	55 (22)	55 (21)
XII. Pastoral, Agricultural, etc.	9 (4)	9 (4)	10 (6)	10 (7)	11 (7)
XIII. Domestic, Hotels, etc.	20 (16)	20 (16)	20 (15)	19 (14)	20 (15)
XIV. Miscellaneous:—					
(i) Banking, Insurance and Clerical	31 (19)	30 (19)	30 (19)	32 (19)	32 (16)
(ii) Public Service	145 (45)	145 (45)	145 (45)	148 (47)	148 (48)
(iii) Retail and Wholesale	8 (7)	8 (7)	8 (7)	8 (8)	8 (8)
(iv) Municipal, Sewerage and Labouring	14 (13)	13 (12)	13 (11)	16 (11)	16 (11)
(v) Other Miscellaneous	108 (40)	107 (39)	108 (41)	108 (42)	108 (41)
Total	781 (361) ^a	775 (356) ^a	775 (355) ^a	776 (354) ^a	784 (356) ^a

NUMBER OF MEMBERS.

Manufacturing:—					
I. Wood, Furniture, etc.	27,054	27,164	25,886	27,079	25,365
II. Engineering, Metal Works, etc.	72,883	69,244	73,363	76,070	79,047
III. Food, Drink, Tobacco, etc.	61,183	62,103	65,663	68,292	72,120
IV. Clothing, Hats, Boots, etc.	51,154	50,173	56,484	59,484	62,269
V. Books, Printing, etc.	18,128	18,113	18,285	18,808	19,425
VI. Other Manufacturing	40,578	42,577	43,720	44,388	46,832
VII. Building	52,582	52,935	53,140	51,034	56,727
VIII. Mining, Quarrying, etc.	32,846	30,166	36,560	36,636	40,184
IX. Railway and Tramway Services	91,880	90,521	91,035	97,443	94,944
X. Other Land Transport	17,158	16,408	13,566	10,539	10,287
XI. Shipping, etc.	32,994	32,691	29,363	26,388	27,340
XII. Pastoral, Agricultural, etc.	21,237	20,997	22,599	28,782	31,800
XIII. Domestic, Hotels, etc.	20,993	20,849	19,585	19,043	16,094
XIV. Miscellaneous:—					
(i) Banking, Insurance and Clerical	28,420	27,884	33,947	34,405	35,315
(ii) Public Service	80,889	79,809	77,365	82,776	83,484
(iii) Retail and Wholesale	24,983	26,426	29,009	32,619	32,178
(iv) Municipal, Sewerage and Labouring	30,639	30,261	32,482	38,926	39,603
(v) Other Miscellaneous	35,221	41,076	40,515	38,118	41,723
Total	740,831	739,398	762,567	790,830	814,809

(a) Allowing for interstate duplication.

(iv) *Trade Unions—Numbers of Male and Female Members and Percentages to total Employees—Australia.* The Census discloses the percentage of male and female employees (i.e., persons in "receipt of wage or salary," and persons "unemployed"), 20 years of age

and over, on the total male and female population, and by applying these percentages to the estimated total male and female population at the end of each year, an estimate of the number of adult employees of each sex in the year is obtained.

The following table shows separately for males and females (a) the number of members of trade unions; (b) the estimated number of employees of each sex 20 years of age and over in all professions, trades and occupations; and (c) the percentage of the former (a) on the latter (b) at the end of each year, 1932 to 1936. The estimated number of employees includes all persons (over the age specified) in receipt of wages or salary, as well as those unemployed, and therefore embraces a large number of adults who are not eligible for membership of any trade union, such as certain persons employed in professional occupations, as well as others who, while eligible for membership so far as the nature of their trade or occupation is concerned, do not reside in a locality which is covered by any union devoted to their particular trade or occupation. Moreover the age at which persons are eligible for membership varies in different unions. The census results are classified in quinquennial age groups, and age 20 years is taken as approximating to the age of admission to membership. A line has also been added showing the estimated numbers of "junior" workers under 20 years of age:—

TRADE UNIONS—NUMBER OF MALE AND FEMALE MEMBERS AND PERCENTAGE TO TOTAL EMPLOYEES.—AUSTRALIA.

Particulars.	1932.	1933.	1934.	1935.	1936.
MALES.					
Estimated No. of Adult Employees (20 years of age and over)	1,330,000	1,344,290	1,393,155	1,401,286	1,426,100
No. of Members of Unions	630,688	626,266	641,370	662,447	685,795
Percentage of Members on Estimated Number of Adult Employees	47.4	46.6	46.0	47.3	48.1
Junior Workers (under 20)	246,500	249,010	253,682	255,160	265,170

FEMALES.					
Estimated No. of Adult Employees (20 years of age and over)	317,250	321,500	363,255	366,102	377,334
No. of Members of Unions	110,143	113,132	121,197	128,383	129,014
Percentage of Members on Estimated Number of Adult Employees	34.7	35.2	33.4	35.1	34.2
Junior Workers (under 20)	139,980	141,960	158,863	160,120	155,305

TOTAL.					
Estimated Number of Adult Employees (20 years of age and over)	1,647,250	1,665,790	1,756,410	1,767,388	1,803,443
Number of Members of Unions	740,831	739,398	762,567	790,830	814,809
Percentage of Members on Estimated Number of Adult Employees	45.0	44.4	43.4	44.7	45.2
Junior Workers (under 20)	386,480	390,970	412,545	415,280	420,481

(v) *Interstate or Federated Unions.* The following table gives particulars as to the number and membership of interstate or federated unions in 1936 :—

INTERSTATE OR FEDERATED UNIONS.—AUSTRALIA, 1936.

Particulars.	Unions Operating in—					Total.
	2 States.	3 States.	4 States.	5 States.	6 States. (a)	
Number of Unions	19	8	21	19	46	113
Number of Members	28,233	13,624	123,008	171,517	324,919	661,301

(a) Certain unions in this group have, in addition to branches in each of the six States, branches in the Northern Territory and the Federal Capital Territory.

It appears, therefore, that 113 out of the 356 separate associations and groups of associations in Australia are organized on an interstate basis. The membership of these 113 unions was 661,301 or 81 per cent. of the membership of all unions.

3. Central Labour Organizations.—In each of the capital cities and in a number of industrial centres elsewhere, delegate organizations consisting of representatives from a group of trade unions have been established. Their revenue is raised by means of a per capita tax on the members of each affiliated union. In most of the towns where such central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council, or the Labour Federation. In Western Australia a unified system or organization extends over the industrial centres throughout the State. In this State there is a provincial branch of the Australian Labour Party, having a central council and executive, and metropolitan and branch district councils, to which the local bodies are affiliated. The central council, on which all district councils are represented, meets periodically. In the other five States, however, the organization is not so close, and, while provision usually exists in the rules of the central council at the capital city of each State for the organization of district councils or for the representation of the central council on the local councils in the smaller industrial centres of the State, the councils in each State are, as a matter of fact, independent bodies.

A new Central Labour Organization, called the Australasian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the Trade Unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May, 1927. The Australasian Council is based on the Metropolitan Trades and Labour Councils in each State, such bodies having the right to appoint two representatives to act on the Executive of the Council. The Metropolitan Trades and Labour Councils are the branches of the Australasian Council. In addition to the representatives from the Metropolitan Councils, the Executive consists of four officers—the President, two Vice-Presidents, and a Secretary, who are elected by and from the All-Australian Trade Union Congress.

The objective of the Council is the socialization of industry, i.e., production and exchange. The methods to be adopted are :—(a) The closer organization of the workers by the transformation of the Australasian Trade Union Movement from the Craft to an Industrial basis by the establishment of one Union in each industry; (b) the consolidation of the Australasian Labour Movement with the object of unified control, administration and action; (c) the centralized control of industrial disputes; and (d) educational propaganda among unions. The Australasian Council

of Trade Unions is the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the Trade Union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the Annual International Labour Conference at Geneva.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated thereto, in each State at the end of the year 1936 :—

CENTRAL LABOUR ORGANIZATIONS.—NUMBER, AND UNIONS AFFILIATED, 1936.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	P.C.Ter.	Total.
Number of Councils	3	5	6	2	8	2	1	27
Number of Unions and Branch Unions affiliated	91	167	84	54	213	59	11	679

The figures given in the preceding table concerning the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated to the local trades councils in the several towns in which they are represented.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines, and composed of delegates from separate unions the interests of the members of which are closely connected by reason of the occupation of their members. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades, may be so classed.

4. **Laws relating to Conditions of Labour.**—In Official Year Book No. 16, pp. 538 to 566, a conspectus was given of Labour Laws in force in Australia at the end of the year 1922, and of Acts and Regulations relating to Factories and Shops.

Information was contained in the same issue regarding employment under Mining Acts, followed by a brief reference to Employers' Liability and Workmen's Compensation Acts and miscellaneous legislation relating to conditions of labour enacted by the States. A conspectus of the Tribunals for the Regulation of Wages and Conditions of Labour was also included.

§ 2. Employers' Associations.

1. **General.**—Recent investigations show that the spirit of association is no less manifest in the case of employers than in the case of workers. Associations for trade purposes merely are not included in the present chapter, which deals with those associations only whose members are united for their own protection, and for representation in cases before Arbitration Courts, Wages Boards and other wage-fixing tribunals. Associations of employers and employees are recognized under the Commonwealth Conciliation and Arbitration Act as well as under several State Acts, and organizations of these bodies may be registered.

The year 1922 was the first for which information was collected, and detailed particulars for that and subsequent years will be found in previous issues of the Official Year Book and in the Labour Reports.

2. Employers' Associations in each State.—The following table gives particulars of the number of employers' associations in each State at the end of the years 1932 to 1936:—

EMPLOYERS' ASSOCIATIONS.

Year.	N.S.W.	Victoria.	Q'land.	S.A.	W.A.	Tas.	Total
NUMBER OF ASSOCIATIONS.							
1932	148	158	85	60	68	30	549
1933	140	153	80	58	62	28	521
1934	(a) 134	157	74	60	54	26	505
1935	(a) 131	150	72	60	56	25	500
1936	(a) 134	150	73	61	58	30	500

NUMBER OF BRANCHES.

1932	907	461	185	18	297	10	1,878
1933	897	508	189	15	288	8	1,905
1934	810	520	135	15	301	8	1,789
1935	786	559	135	13	302	8	1,803
1936	800	608	393	32	290	0	2,141

MEMBERSHIP.

1932	54,005	37,342	18,929	6,656	10,189	2,504	129,625
1933	56,384	37,929	18,721	6,452	10,311	2,391	132,188
1934	a 58,387	38,276	18,943	6,765	10,464	2,095	134,930
1935	a 59,444	37,705	18,550	7,536	10,791	2,087	136,179
1936	a 60,135	50,202	35,774	8,813	11,193	2,257	a 168,424

(a) Includes 1 association in Federal Capital Territory.

There has been a large increase in the number of branches since the year 1926, due to the inclusion of associations representing agricultural interests, while the increase in total membership is partly attributable to a more complete collection of statistics relating to these organizations.

3. Employers' Associations in Industrial Groups. The figures in the following table refer to Australia at the end of the years 1935 and 1936:—

EMPLOYERS' ASSOCIATIONS.—INDUSTRIAL GROUPS, AUSTRALIA.

Class.	Number of Associations.		Number of Branches.		Membership	
	1935.	1936.	1935.	1936.	1935.	1936.
Manufacturing:—						
I. Wood, Furniture, etc. ..	20	20	4	5	1,195	1,195
II. Engineering, etc. ..	13	13	12	12	2,378	2,378
III. Food, Drink, etc. ..	100	100	80	78	20,950	20,950
IV. Clothing, Hats, etc. ..	17	17	2	5	1,652	1,652
V. Books, Printing, etc. ..	38	39	..	..	2,991	2,991
VI. Other Manufacturing ..	45	40	1	1	3,318	3,318
VII. Building	28	25	10	4	2,000	2,000
VIII. Mining, Quarrying, etc. ..	10	11	..	..	296	296
X. Other Land Transport ..	15	13	21	..	1,835	1,835
XI. Shipping, etc. ..	16	19	10	3	209	209
XII. Pastoral, Agricultural, etc.	48	50	1,638	1,978	81,953	103,280
XIII. Domestic, Hotels, etc. ..	17	17	..	25	1,994	8,450
XIV. Miscellaneous	127	136	19	30	10,338	19,744
Total	500	506	1,803	2,141	136,179	168,424

The female membership of these associations was 6,056 for 1935, and 6,115 for 1936.

The organization of employers is relatively strongest in the pastoral and agricultural industries and in the manufacture and distribution of articles of food and drink. In the former case there has been considerable growth in organization among small farmers, and in the latter, the number of small shops purveying foodstuffs of which the proprietors are members of grocers', butchers' and other similar associations accounts for the large membership.

4. **Federations of Employers' Associations.**—In addition to the associations in various industries, there are central associations in each State, to which many of these separate organizations are affiliated. Examples of this kind of association are provided in the Chamber of Manufactures, Chamber of Commerce and Employers' Federation in each State. Further, these State associations are, in some cases, organized on a federal basis, e.g., there is an Associated Chamber of Manufactures, an Associated Chamber of Commerce, or a Central Council of Employers, to which State branches are affiliated.

The affiliation of these associations is, however, of a very loose nature when compared with that of the Federated Trade Unions. Whereas in the latter case the central body has complete control of its State branches, in the case of the Employers' Associations each State body enjoys complete independence, the central body acting in a more or less advisory capacity only.

The following table gives particulars, so far as can be ascertained, of interstate or federated associations having branches in two or more States from 1932 to 1936:—

INTERSTATE OR FEDERATED EMPLOYERS' ASSOCIATIONS.

Associations Operating in—									
Year.						Total.			
	2 States.	3 States.	4 States.	5 States.	6 States.				
NUMBER OF ASSOCIATIONS.									
1932	5	4	4	13	19	45			
1933	6	4	5	14	16	45			
1934	4	2	12	8	17	43			
1935	4	2	10	6	20	42			
1936	5	2	8	6	17	38			
NUMBER OF MEMBERS.									
1932	1,132	323	842	59,993	40,872	103,162			
1933	1,354	290	1,118	66,144	35,290	104,205			
1934	2,438	56	44,745	22,947	34,026	104,212			
1935	10,529	57	3,311	93,155	37,723	114,775			
1936	11,315	904	1,013	22,324	104,890	140,452			

The above table shows that associations having 83 per cent. of the total membership of employers' organizations are grouped together on an interstate basis.

E.—COMPARATIVE INDEX-NUMBERS.

In order to show the relative movements of certain price and related data the following table of annual and quarterly index-numbers for the six capital cities combined has been compiled with a common base 1911 = 1,000.

COMPARATIVE INDEX-NUMBERS FOR THE SIX CAPITAL CITIES COMBINED.

(Base(a) of each Section: Weighted Average of Six Capitals 1911 = 1,000.)

Period.	Food and Groceries.	Housing.		Food and Housing.		All Items of Household Expenditure.	Wholesale Prices Melbourne.	Nominal Wages, Adult Males.	Real Wages. (b)	Percentage of Unemployment among Trade Unionists.
		All Houses.	4 and 5 Rooms.	All Houses.	4 and 5 Rooms.					
Year—						(c) 1,000				%
1911 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	4.7
1914 ..	1,144	1,135	1,082	1,140	1,121	1,140	1,149	1,081	948	3.3
1920 ..	2,101	1,333	1,392	1,785	1,873	1,935	2,480	1,627	911	6.5
1921 ..	1,902	1,404	1,410	1,697	1,717	1,680	1,903	1,826	1,076	11.2
1928 ..	1,761	1,758	1,743	1,760	1,755	1,675	1,792	1,903	1,115	10.8
1929 ..	1,866	1,760	1,754	1,822	1,824	1,713	1,803	1,972	1,082	11.1
1930 ..	1,682	1,685	1,711	1,683	1,693	1,618	1,596	1,939	1,152	19.3
1931 ..	1,477	1,483	1,473	1,479	1,475	1,448	1,428	1,752	1,185	27.4
1932 ..	1,425	1,374	1,330	1,403	1,391	1,377	1,411	1,639	1,168	29.0
1933 ..	1,342	1,356	1,314	1,345	1,332	1,335	1,409	1,584	1,178	25.1
1934 ..	1,100	1,365	1,324	1,385	1,371	1,355	1,468	1,590	1,148	20.5
1935 ..	1,442	1,388	1,372	1,420	1,416	1,380	1,469	1,600	1,133	16.5
1939 ..	1,475	1,441	1,437	1,491	1,491	1,409	1,543	1,635	1,110	12.2
Quarter—										
1927.										
March ..	1,782	1,723	1,673	1,758	1,741	1,656	1,737	1,944	1,106	5.9
June ..	1,758	1,721	1,678	1,743	1,728	1,648	1,743	1,912	1,114	6.4
Sept. ..	1,794	1,740	1,690	1,774	1,755	1,666	1,882	1,944	1,096	6.7
Dec. ..	1,820	1,746	1,694	1,789	1,773	1,678	1,904	1,955	1,093	8.9
1928.										
March ..	1,771	1,765	1,744	1,768	1,761	1,675	1,840	1,966	1,112	10.7
June ..	1,784	1,760	1,745	1,774	1,769	1,684	1,820	1,963	1,107	11.2
Sept. ..	1,745	1,752	1,741	1,748	1,744	1,670	1,764	1,963	1,123	11.4
Dec. ..	1,746	1,752	1,742	1,749	1,744	1,670	1,744	1,959	1,120	9.9
1929.										
March ..	1,859	1,763	1,758	1,820	1,821	1,713	1,788	1,958	1,076	9.3
June ..	1,865	1,759	1,753	1,821	1,823	1,713	1,794	1,977	1,086	10.0
Sept. ..	1,867	1,761	1,754	1,823	1,824	1,713	1,834	1,979	1,086	12.1
Dec. ..	1,873	1,755	1,751	1,825	1,827	1,712	1,799	1,974	1,082	13.1
1930.										
March ..	1,751	1,752	1,782	1,752	1,763	1,670	1,680	1,973	1,126	14.6
June ..	1,734	1,724	1,744	1,730	1,738	1,653	1,667	1,956	1,131	18.5
Sept. ..	1,673	1,662	1,692	1,668	1,660	1,607	1,599	1,939	1,162	20.5
Dec. ..	1,568	1,600	1,625	1,582	1,590	1,542	1,438	1,887	1,193	23.4
1931.										
March ..	1,538	1,557	1,560	1,546	1,546	1,500	1,453	1,814	1,173	25.8
June ..	1,496	1,507	1,501	1,501	1,498	1,404	1,437	1,704	1,175	27.6
Sept. ..	1,435	1,464	1,447	1,447	1,439	1,423	1,406	1,735	1,199	28.3
Dec. ..	1,439	1,466	1,382	1,425	1,418	1,406	1,418	1,694	1,189	28.0
1932.										
March ..	1,465	1,301	1,358	1,435	1,425	1,403	1,434	1,680	1,171	28.3
June ..	1,448	1,378	1,345	1,419	1,409	1,389	1,410	1,672	1,178	30.0
Sept. ..	1,416	1,367	1,327	1,395	1,382	1,370	1,418	1,608	1,153	29.6
Dec. ..	1,369	1,359	1,314	1,393	1,348	1,346	1,384	1,597	1,172	28.1
1933.										
March ..	1,317	1,357	1,316	1,330	1,318	1,327	1,336	1,585	1,192	26.5
June ..	1,337	1,334	1,314	1,342	1,322	1,334	1,401	1,595	1,180	25.7
Sept. ..	1,359	1,355	1,311	1,355	1,311	1,340	1,467	1,587	1,171	25.1
Dec. ..	1,355	1,357	1,311	1,354	1,339	1,337	1,432	1,570	1,160	23.0
1934.										
March ..	1,371	1,366	1,315	1,365	1,350	1,344	1,456	1,572	1,152	21.9
June ..	1,404	1,395	1,319	1,387	1,372	1,358	1,463	1,592	1,148	20.9
Sept. ..	1,401	1,367	1,331	1,387	1,375	1,357	1,492	1,596	1,151	20.4
Dec. ..	1,422	1,368	1,332	1,400	1,388	1,361	1,474	1,599	1,142	18.8
1935.										
March ..	1,420	1,374	1,356	1,401	1,396	1,368	1,451	1,604	1,145	18.6
June ..	1,425	1,381	1,363	1,407	1,402	1,371	1,456	1,605	1,141	17.8
Sept. ..	1,461	1,394	1,379	1,433	1,430	1,389	1,491	1,609	1,123	15.9
Dec. ..	1,460	1,403	1,390	1,437	1,434	1,391	1,479	1,617	1,125	13.7
1936.										
March ..	1,445	1,419	1,413	1,434	1,433	1,391	1,475	1,620	1,130	13.4
June ..	1,455	1,430	1,425	1,445	1,444	1,397	1,520	1,625	1,125	12.6
Sept. ..	1,480	1,454	1,475	1,474	1,474	1,420	1,570	1,637	1,110	12.0
Dec. ..	1,510	1,491	1,491	1,490	1,491	1,439	1,607	1,656	1,111	10.7

(a) The index-numbers given in the separate columns of the table cannot be compared with each other in order to show the relative cost of housing and food and groceries. In the table of 1911, each group of index-numbers is made equal to 1,000. (b) Calculated by Food and Rent of All Houses ("A" Series) Index. See p. 562 for Real Wages and the "C" Series Index. (c) Taken from true base (November, 1911) by means of the Food and Rent of All Houses ("A" Series) Index.

CHAPTER XVIII. MINERAL INDUSTRY.

(NOTE.—A table showing particulars of mineral production for the year 1936 will be found in the Appendix. With the exception of gold this information was not available at the time of compilation of this chapter. Details of gold production are included in § 2 hereinafter.)

§ 1. The Mineral Wealth of Australia.

1. *Place of Mining in Australian Development.*—The value of production from the mineral industry is now considerably less than that returned by the agricultural or the pastoral industry, nevertheless it was the discovery of gold in payable quantities that first attracted population to Australia in large numbers and thus accelerated its national development.

2. *Extent of Mineral Wealth.*—The extent of the total mineral wealth of Australia cannot yet be regarded as completely ascertained, as large areas of country still await systematic prospecting. More detailed reference to this matter will be found in preceding Official Year Books. (*See* No. 22, p. 755.)

3. *Quantity and Value of Production in 1935.*—The quantities (where available) and the values of the principal minerals produced in each State, and in Australia as a whole, during the year 1935 are given in the tables immediately following. It must be clearly understood that the figures quoted in these tables refer to the quantities and values of the various minerals in the form in which they were reported to the State Mines Departments, and represent amounts which the Mines Departments consider may fairly be taken as accruing to the mineral industry as such. They are not to be regarded as representative of Australia's potentiality as a producer of *metals*, this matter being dealt with separately in § 17 hereinafter. New South Wales is, of course, in normal times, a large producer of iron and steel from ironstone mined in South Australia. As the table shows, the latter State receives credit for this ironstone in its mineral returns. The iron and steel produced therefrom cannot be assigned to the mineral industry of New South Wales, but the value of the transformation from ore to metal is credited to the manufacturing industry of that State. Similarly lead, silver-lead and zinc are credited in the form reported to the State of origin—chiefly New South Wales—although the actual metal extraction is carried out principally in South Australia and Tasmania.

MINERAL PRODUCTION.—QUANTITIES, 1935.

Minerals.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (c)	Australia.
Antimony ..	ton	49	11	..	..	..	..	..	60
Arsenic ..	..	370	..	..	..	3,728	..	..	4,098
Asbestos ..	cwt.	..	..	..	35	2,820	..	..	2,855
Barytes ..	ton	204	..	..	2,340	..	..	..	2,544
Bismuth ..	cwt.	95	..	368	..	..	6	..	469
Brown Coal ..	ton	..	2,221,515	..	..	..	..	..	2,221,515
Coal ..	..	8,698,579	176,495	1,051,978	..	537,188	123,714	..	10,887,954
Copper (ingot, matte, etc.) ..	..	856	..	2,900	250	..	13,036	..	17,048
Diatomaceous earth ..	..	2,712	302	..	..	..	..	..	3,014
Gold ..	fine oz.	50,102	87,609	102,990	7,333	649,049	8,343	5,066	910,492
Gypsum ..	ton	1,695	8,712	..	102,268	5,462	..	..	118,137
Ironstone ..	..	12,069	..	1,110	1,868,719	..	25,555	..	1,907,462
Kaolin ..	..	9,975	4,500	..	186	..	..	..	14,661
Lead ..	..	(b)	..	32,952	..	..	1,488	..	(c) 34,440
Lead and silver-lead ore, concentrates, etc. ..	..	243,817	..	..	..	..	..	..	243,817

(b) See letterpress preceding this table.

(c) Year ended 30th June.

(e) Incomplete.

MINERAL PRODUCTION.—QUANTITIES, 1935—continued.

Minerals.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (c)	Australia.
Limestone flux ..	..	104,953	..	12,413	11,663	..	254,438	..	383,467
Magnesite ..	..	15,688	330	..	50	..	..	..	16,068
Manganese ore ..	..	148	..	..	..	..	..	..	148
Molybdenite ..	cwt.	..	..	212	..	..	..	..	212
Osmiridium ..	oz.	..	..	..	..	..	235	..	235
Phosphate ..	ton	235	..	..	..	..	..	..	235
Pigments ..	oz.	456	..	..	16	..	..	..	472
Platinum ..	oz.	98	..	..	..	..	..	..	98
Salt ..	ton	..	(a)	..	78,003	..	..	..	78,003
Sapphires ..	oz.	55	..	(d)	..	..	..	..	55
Shale (oil) ..	ton	..	..	..	..	..	..	..	..
Silver ..	fine oz.	62,198	3,948	2,109,165	..	79,876	323,001	30	2,879,001
Tin and tin ore ..	ton	1,096	88	1,189	..	60	1,131	39	3,602
Wolfram ..	cwt.	1,095	..	480	..	..	4,640	1,546	8,061
Zinc concentrates ..	ton	243,604	..	4,411	..	..	..	..	248,015

(a) Not available for publication. (b) See letterpress preceding this table. (c) Year ended 30th June. (d) Quantity not stated. (e) Incomplete.

The values of the minerals raised in each State in 1935 are given in the following table:—

MINERAL PRODUCTION.—VALUE, 1935.

Minerals.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N.T. (d)	Australia;
	£	£	£	£	£	£	£	£
Antimony ..	780	270	..	..	..	..	..	1,050
Arsenic ..	14,571	..	..	..	67,168	..	..	81,679
Asbestos ..	..	..	..	359	2,889	..	..	3,248
Barytes ..	306	..	..	6,091	..	..	..	6,397
Bismuth ..	285	..	7,639	..	..	146	..	8,070
Brown Coal ..	..	317,444	..	..	..	..	..	317,444
Coal ..	4,887,341	282,253	843,034	..	318,013	86,204	..	6,416,845
Copper (ingot and matte) ..	30,071	..	101,489	11,065	..	494,007	..	606,632
Diamonds ..	..	..	..	..	..	..	..	..
Diatomaceous earth ..	5,424	1,246	..	..	..	..	..	6,670
Gold ..	439,140	768,401	904,755	64,109	5,677,328	73,143	44,458	7,971,334
Gypsum ..	847	2,629	..	76,701	6,888	..	..	87,065
Ironstone ..	5,838	..	677	2,119,027	..	25,555	..	2,181,097
Kaolin ..	7,625	4,573	..	744	..	..	..	12,942
Lead ..	(b)	..	474,221	..	..	21,390	..	(g) 492,611
Lead and silver concentrates, etc. ..	43,181,278	..	..	..	..	..	..	43,181,278
Limestone flux ..	20,990	..	9,969	4,374	..	68,357	..	104,690
Magnesite ..	27,454	1,254	..	75	..	..	..	28,783
Manganese ore ..	444	..	..	..	..	..	..	444
Molybdenite ..	..	..	1,953	..	..	..	..	1,953
Opal ..	5,070	..	200	3,228	..	..	..	8,498
Osmiridium ..	..	..	..	..	..	2,103	..	2,103
Phosphate ..	176	..	..	..	..	..	..	176
Pigments ..	684	..	..	80	..	..	..	764
Platinum ..	649	..	..	..	..	..	..	649
Salt ..	..	(f)	..	175,507	..	..	..	(g) 175,507
Sapphires ..	132	..	1,805	..	..	..	..	1,937
Shale (oil) ..	..	..	..	..	..	15	..	15
Silver ..	(b) 8,110	642	284,678	..	12,687	42,323	..	(g) 348,440
Tin and tin ore ..	287,390	14,475	187,234	..	8,829	258,919	6,036	703,383
Wolfram ..	5,604	..	2,888	..	..	29,345	10,380	48,307
Zinc concentrates ..	230,890	..	68,863	..	..	..	..	299,753
Unenumerated ..	(c) 49,131	1,066	1,035	7,287	14,248	..	616,026	88,793
Total ..	9,210,820	1,394,253	2,887,440	2,498,617	6,107,990	1,071,507	76,900	23,217,527

(a) For items excluded see letterpress below. (b) See letterpress above preceding table. (c) Includes dolomite £8,960, silica £10,837, fireclay £10,443, and zircon-rutile-ilmenite £12,691. (d) Year ended 30th June. (e) Mica, £15,762. (f) Not for publication. (g) Incomplete.

It may be pointed out in connexion with the figures given in the above table that the totals are exclusive of certain commodities, such as stone for building and industrial uses, sand, gravel, brick and pottery clays, lime, cement and slates, which might be included under the generic term "mineral." Valuations of the production of some of these may be obtained from the reports of the various Mines Departments, but in regard to others it is impossible to obtain adequate information. In certain instances, moreover, the published information is of little value. Some of the items excluded, such as cement, carbide and sulphuric acid are included in manufacturing production, and, in any case, only the raw material could properly be included in mineral production. The items excluded from the total for New South Wales in 1935 consisted of—lime, £47,777; building stone, £90,632; Portland cement, £992,377; coke, £802,887; road materials, £875,451; shell grit, £13,630; sulphur and sulphuric acid, £75,132; and brick and pottery clays, £303,838. Carbide, £115,350, and cement, £214,542, have been excluded from the Tasmanian figures.

4. Value of Production, 1931 to 1935.—The value of the mineral production in each State for the five years 1931 to 1935 is given in the table hereunder:—

MINERAL PRODUCTION.—VALUE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
	£	£	£	£	£	£	£	£
1931 ..	6,517,703	882,334	1,274,053	518,204	3,410,472	707,234	11,416	13,352,316
1932 ..	6,533,191	908,094	1,818,701	837,806	4,731,740	730,058	13,811	15,583,301
1933 ..	6,964,834	1,060,137	2,373,251	1,076,434	5,269,194	845,068	18,150	17,607,068
1934 ..	7,766,504	1,092,029	2,713,135	1,713,537	5,864,430	750,389	28,806	19,948,830
1935 ..	9,210,820	1,391,253	2,887,440	2,198,017	6,107,990	1,071,507	76,000	23,217,527

The value of the mineral production in 1935 exceeded that of 1934 by nearly £3,300,000. All of the States recorded increases in values, mainly through the agency of silver-lead ores and concentrates, ironstone, coal, gold, copper or silver. Of these silver-lead ores and concentrates were the most important; the production increased by 2,331 tons, which together with an increase in price accounted for nearly £1,000,000 of the £3,300,000 mentioned above.

Greater activity in the iron and steel industry accounted for the improvement recorded in the output of ironstone which followed next in importance after silver-lead ores and concentrates. South Australia, the principal producing State, raised its output from 1,200,000 tons to 1,900,000 tons.

The output of black coal increased by 1,100,000 tons, valued at £547,000, the improvement being practically confined to New South Wales although all States reported increased outputs.

The production of gold increased by 23,883 fine ounces during 1935. The increase was not as great as that of the previous year owing to industrial trouble in Western Australia and at Mount Coolon in Queensland.

Copper production rose by nearly 5,000 tons and £210,000 in value. This development was practically confined to Tasmania.

Increased production at enhanced values was also recorded for silver, zinc and zinc concentrates, and the output of tin was also larger although the price declined slightly during the year.

Particulars of the variations in production, etc., by States, will be found in greater detail in the various sections hereinafter.

5. **Total Production to end of 1935.**—In the next table will be found the estimated value of the total mineral production in each State up to the end of 1935. The items mentioned as excluded from the preceding table are also omitted in the following table. Thus the total for New South Wales falls short by £55,000,000 of that published by the State Department of Mines, the principal items excluded being coke, £16,998,000; cement, £21,633,000; lime, £1,814,000; and considerable values for marble, slate, granite, chert, gravels, etc., which the Department now includes in the returns for quarries.

MINERAL PRODUCTION.—VALUE TO END OF 1935.

Minerals.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter. (a)	Australia
	£	£	£	£	£	£	£	Million. £
Gold ..	65,215,931	306,026,403	88,722,689	1,853,775	188,895,011	9,231,406	2,317,534	662
Silver and lead ..	120,322,087	266,887	7,358,185	383,417	2,314,363	9,331,142	66,324	150
Copper ..	18,766,988	216,786	27,198,886	33,171,001	1,809,660	23,335,426	233,693	100
Iron ..	7,751,599	15,611	501,739	11,349,775	10,722	91,193	..	23
Flu ..	15,531,018	997,217	11,711,652	..	1,627,665	18,087,802	617,299	39
Wolfram ..	200,087	11,885	1,071,425	301	1,441	300,468	235,973	2
Zinc ..	25,270,008	..	82,323	15,993	5,137	996,077	..	26
Coal ..	212,301,770	16,014,297	23,125,625	..	8,095,643	2,205,452	..	262
Other ..	8,583,791	913,311	2,867,803	5,472,732	470,215	2,781,349	108,406	21
Total ..	1,804,474,719	321,167,030	162,994,127	55,218,127	203,262,486	64,957,337	3,639,139	1,295

(a) To 30th June, 1935.

The "other" minerals in New South Wales include alunite, £210,000; antimony, £368,000; arsenic, £190,000; bismuth, £245,000; chrome, £131,000; diamonds, £147,000; magnesite, £276,000; molybdenite, £215,000; opal, £1,613,000; scheelite, £195,000; and oil shale, £2,695,000. In the Victorian returns antimony ore was responsible for £612,000. The value for coal in this State includes £2,708,000 for brown coal. Included in "other" in the Queensland production were opal, £187,000; gems, £640,000; bismuth, £130,000; cobalt, £158,000; molybdenite, £603,000; limestone flux, £791,000; and arsenic, £124,000. The chief items in South Australian "other" minerals were salt, £3,508,000; limestone flux, £300,000; gypsum, £975,000; phosphate, £135,000; and opal, £139,000. In the Tasmanian returns osmiridium was responsible for £610,000, scheelite for £112,000, and iron pyrites for £133,000.

6. **Quarries.**—Hitherto the data published in the Official Year Book relating to the mineral industry has contained no reference to quarrying. At the Conference of Australian Statisticians held in March, 1935, it was resolved that the values of quarry products should be included with mining. Steps are now being taken to give effect to this resolution, but some time must elapse before material can be collected in all States.

7. **Geophysical Methods for Detection of Ore Deposits.** Reference to the application of geophysical survey methods in Australia will be found in Official Year Book No. 24, p. 570. See also § 16 hereinafter.

§ 2. Gold.

1. **Discovery in Various States.**—The discovery of gold in payable quantities was an epoch-making event in Australian history, for, as one writer aptly phrases it, this event "precipitated Australia into nationhood." A more or less detailed account of the finding of gold in the various States appears under this section in Official Year Books Nos. 1 to 4

2. **Production at Various Periods.**—In the following table will be found the value of the gold raised in the several States and in Australia as a whole during each of the eight decennial periods from 1851 to 1930, and in single years from 1925 to 1936. Owing to the defective information in the earlier years the figures fall considerably short of the actual totals, for during the first stages of mining development large quantities of gold were taken out of Australia by successful diggers who preferred to keep the amount of their wealth secret.

GOLD.—VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Australia.
	£	£	£	£	£	£	£	£
1851-60..	11,530,583	93,337,052	14,565	..	..	788,564	..	105,670,764
1861-70..	13,676,103	65,106,264	2,076,494	..	..	12,174	..	80,871,035
1871-80..	18,576,654	40,625,188	10,733,048	579,068	..	700,048	79,022	61,293,028
1881-90..	4,306,541	28,413,792	13,843,081	240,668	18,473	1,514,921	713,345	49,216,821
1891-1900	10,332,120	29,904,152	23,939,359	219,931	22,308,524	2,338,336	906,988	89,999,410
1901-10..	9,569,492	30,136,686	23,412,395	310,080	75,540,415	2,566,170	473,871	142,009,109
1911-20..	1,088,477	13,751,217	9,877,777	23,808	16,808,171	83,302	300,642	76,240,384
1921-30..	940,946	2,721,309	1,976,715	47,564	20,462,957	193,833	9,894	26,353,218
1925 ..	82,498	209,901	197,118	3,535	1,874,330	14,969	1,939	2,375,280
1926 ..	82,551	208,471	43,914	3,219	1,857,716	17,936	594	2,214,401
1927 ..	76,595	163,690	161,321	1,776	1,734,571	20,046	468	2,159,076
1928 ..	54,503	144,068	56,395	2,253	1,671,093	15,306	431	1,944,054
1929 ..	31,842	111,609	40,250	4,289	1,602,142	23,772	553	1,814,457
1930 ..	53,066	102,456	33,224	5,569	1,773,500	18,976	57	1,986,843
1931 ..	118,623	262,488	79,652	17,328	3,054,743	28,150	2,535	3,563,519
1932 ..	203,622	351,586	173,144	22,013	4,413,809	43,137	4,196	5,211,512
1933 ..	226,068	448,228	710,168	49,619	4,915,950	51,579	4,449	6,406,061
1934 ..	307,662	597,040	982,636	58,582	5,534,491	48,139	8,124	7,536,674
1935 ..	439,140	768,401	904,755	64,109	5,077,328	73,143	44,458	7,971,331
1936 ..	525,792	987,001	1,048,748	66,593	7,326,306	152,201	70,001	10,182,738
Total ..								
1851-1936	65,741,062	307,013,407	89,821,443	1,919,829	190,721,350	9,333,695	12,423,535	672,525,221

The values quoted on this page are in Australian currency throughout.

Owing to the exhaustion of the more easily worked deposits and the unprofitableness of gold-mining during the era of high prices following the Great War, the production of gold in Australia declined from 3,838,029 ozs. in 1903 to 427,159 ozs. in 1929, the lowest output since the discovery of the precious metal.

Increased activity in prospecting due to prevailing economic conditions resulted in some improvement in 1930, but the marked development since that year received its impetus from the heavy depreciation of Australian currency in terms of gold. Oversea and local capital has been attracted to the industry and the employment of advanced geological methods and technical improvements have brought many difficult or extinct propositions into profit. The output of gold rose from 466,593 ozs. in 1930 to 1,176,995 ozs. in 1936, and further increases are forecast as new units are approaching production and many existing ones are being extensively developed. Values in Australian currency assigned to the production of gold during recent years in the above table are £5 19s. 9d. in 1931, £7 5s. 11½d. in 1932, £7 14s. 3½d. in 1933, £8 10s. 0½d. in 1934, £8 15s. 1¼d. in 1935 and £8 13s. 2d. in 1936. Monthly fluctuations in the price of gold in London and in Australia are shown in Chapter XXVII.—Public Finance. Reference to the bounty paid by the Commonwealth Government on local production will be found in § 16 par. 1 hereinafter.

The amount of gold raised in Australia in any one year attained its maximum in 1903, in which year Western Australia also reached its highest point. For the other States the years in which the greatest yields were obtained were as follows:—New South Wales, 1852; Victoria, 1856; Queensland, 1900; South Australia, 1894; and Tasmania, 1899.

The following table shows the quantity in fine ounces of gold raised in each State and in Australia during each of the five years ending 1936. A separate line is added showing the total production in thousands of fine ounces from 1851 to 1936:—

GOLD.—QUANTITY PRODUCED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Ter. (a)	Australia
	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.
1932 ..	27,941	47,745	23,263	3,014	605,561	5,937	674	714,135
1933 ..	29,252	58,183	91,997	6,301	637,207	6,673	594	830,267
1934 ..	30,123	70,196	115,471	6,870	651,338	5,622	980	886,604
1935 ..	50,102	87,609	102,990	7,333	649,049	8,343	5,066	910,492
1936 ..	60,739	113,940	121,174	7,681	840,208	17,600	8,753	1,176,095
Total (b)								
1851-1936	15,225	71,770	20,602	419	42,205	2,159	554	152,934

(a) Year ended 30th June.

(b) '000 omitted in each case

3. Changes in Relative Positions of States as Gold Producers.—The figures in the table showing the value of gold raised explain the enormous increase in the population of Victoria during the period 1851 to 1861, when an average of over 40,000 persons reached the Colony each year. With the exception of the year 1889, when its output was exceeded by that of Queensland, Victoria maintained its position as the chief gold-producer for a period of forty-seven years, or up to 1898, when its production was surpassed by that of Western Australia, the latter State from this year onward contributing practically half, and so far as the last ten years are concerned nearly four-fifths of the entire yield of Australia.

4. Place of Australia in the World's Gold Production.—The table given below shows the world's gold production, and the share of Australia therein in decennial periods since 1851 and during each of the last six years for which returns are available. The figures given in the table have been compiled from the best authoritative sources of information.

GOLD.—WORLD'S PRODUCTION.

Period.	World's Production of Gold.	Gold Produced in Australia.	Percentage of Australia on Total.
	Fine ozs.	Fine ozs.	%
1851-60	61,352,295	24,877,013	40.55
1861-70	53,675,679	19,038,661	35.47
1871-80	50,473,314	14,429,599	28.59
1881-90	51,998,060	11,586,626	22.28
1891-1900	102,695,748	21,187,661	20.63
1901-10	182,891,525	33,434,066	18.28
1911-20	206,114,773	17,426,466	8.45
1921-30	186,091,278	5,841,902	3.14
1930	20,832,783	467,742	2.25
1931	22,786,773	595,123	2.61
1932	24,204,275	714,135	2.95
1933	25,568,779	830,267	3.25
1934	27,063,039	886,609	3.28
1935	29,450,347	910,492	3.09

For the year 1935 the world's production of gold in fine ounces was 20,450,000, as compared with a return of 27,063,000 fine ounces in 1934. It is estimated that the world's production in 1930 approximated 35,000,000 fine ounces, of which Australia's share amounted to 1,176,005 fine ounces or 3.30 per cent.

The quantity of gold produced in the ten chief producing countries in each of the five years 1931 to 1935 is given in the table hereunder. Particulars of the quantity and value of the gold production for all countries for the ten years 1926-35 will be found in the Australian Production Bulletin No. 30 issued by this Bureau

GOLD.—PRODUCTION, CHIEF COUNTRIES.

Country.	1931.	1932.	1933.	1934.	1935.
	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.	Fine ozs.
Union of South Africa	10,877,777	11,558,332	11,013,712	10,479,857	10,773,901
Soviet Union ..	1,700,060	1,000,000	2,814,000	3,700,000	4,500,000
Canada ..	2,693,892	3,044,387	2,949,309	2,972,074	3,284,890
United States ..	2,213,741	2,210,108	2,276,682	2,742,161	3,231,008
Australia ..	595,123	714,135	830,267	886,609	910,492
Rhodesia ..	532,111	580,484	645,087	693,265	727,028
Mexico ..	623,003	584,108	637,727	602,000	682,319
Japan ..	425,000	462,251	502,873	531,371	673,475
India ..	330,484	320,600	330,100	322,100	327,000
Gold Coast	261,651	278,782	305,000	326,040	358,835

The next table shows the average yearly production in order of importance of the yield in the chief gold-producing countries for the decennium of 1926-1935:—

GOLD.—AVERAGE ANNUAL PRODUCTION, CHIEF COUNTRIES, 1926 TO 1935.

Country.	Quantity.	Country.	Quantity.
	Fine ozs.		Fine ozs.
Union of South Africa ..	10,626,406	Australia ..	632,421
Canada ..	2,447,253	Rhodesia ..	605,517
United States ..	2,322,434	Japan ..	425,259
Soviet Union ..	2,030,173	India ..	348,200
Mexico ..	670,803	Gold Coast ..	252,808

5. Employment in Gold Mining.—The number of persons engaged in gold mining in each State at various intervals since 1901 is shown in the following table. The figures are inclusive of prospectors, etc., so far as they are ascertainable and include those who may not have worked during the whole of the year.

GOLD MINING.—PERSONS EMPLOYED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Total
	No.	No.	No.	No.	No.	No.	No.	No.
1901 ..	12,064	27,387	9,438	(a)1,000	19,771	1,112	(a) 200	79,972
1903 (b) ..	11,247	25,208	9,229	(a)1,000	20,716	973	(a) 200	68,573
1913 ..	3,570	11,931	3,123	800	13,145	481	175	33,525
1923 ..	1,141	2,982	603	32	5,555	119	30	10,462
1929 ..	684	804	326	58	4,108	63	5	6,108
1930 ..	4,229	942	903	114	4,452	43	4	10,687
1931 ..	9,044	4,258	2,751	180	6,344	160	70	23,713
1932 ..	8,154	6,089	3,803	142	7,083	250	80	26,600
1933 ..	6,913	6,126	3,107	231	9,700	200	0	27,338
1934 ..	7,080	6,000	3,807	804	12,823	270	115	31,007
1935 ..	6,052	6,060	3,931	243	14,708	210	493	33,113

(a) Estimated.

(b) Year of Maximum Production.

Owing to causes referred to earlier in this section, the number employed in gold-mining had dwindled to the comparatively small figure of 1,103 in 1929. Stimulated by the enhanced price of gold in recent years a revival has occurred in the industry and employment therein has increased more than five-fold since 1929.

6. **Bounty on Production.**—A reference to the bounty provided by the Commonwealth on gold production in Australia will be found in § 16 par. 1 hereinafter.

§ 3. Platinum and Platinoid Metals.

1. **Platinum.**—(i) *New South Wales.* The deposits at present worked in the State are situated in the Fifield division, near Parkes, and the production in 1935 amounted to 98 ozs., valued at £649 as compared with 180 ozs., valued at £1,271 in the preceding year, while the total production recorded to the end of 1935 amounted to 20,093 ozs., valued at £127,627.

(ii) *Victoria.* In Gippsland the metal has been found in association with copper and 127 ozs. were produced in 1913, but there was no production in recent years.

(iii) *Queensland.* Platinum, associated with osmiridium, has been found in the beach sands between Southport and Currumbin, in creeks on the Russell gold-field near Innisfail, and in alluvial deposits on the Gympie gold-field, but no production has been recorded.

2. **Osmium, Iridium, etc.**—(i) *New South Wales.* Small quantities of osmium, iridium and rhodium are found in various localities. Platinum, associated with iridium and osmium, has been found in the washings from the Aberfoil River, about 15 miles from Oban; on the beach sands of the northern coast; in the gem sand at Bingara, Mudgee, Bathurst and other places. In some cases, as for example in the beach sands of Ballina, the osmiridium and other platinoid metals amount to as much as 40 per cent. of the platinum, or about 28 per cent. of the whole metallic content,

(ii) *Victoria.* In Victoria, iridosmine has been found near Foster, and at Waratah Range, South Gippsland.

(iii) *Tasmania.* The yield of osmiridium was returned as 235 ozs. in 1935 valued at £2,103 compared with the record production of 3,395 ozs. in 1925 valued at £103,570. The decrease in later years was largely due to the decline in price from £31 in 1925 to £9 per oz. in 1935, but the depletion of the known alluvial deposits was also a factor.

§ 4. Silver, Lead and Zinc.*

1. **Occurrence in Each State.**—Particulars regarding the occurrence of silver and associated metals in each State were given in Official Year Books, Nos. 1 to 5.

2. **Production.**—(i) *General.* The value of the production of silver, silver-lead ore and lead from each State during the five years ending 1935 is given hereunder:—

SILVER AND LEAD.—PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter. (a)	Australia.
	£	£	£	£	£	£	£	£
1931 ..	1,079,359	9	306,393	5	3,103	54,778	160	1,443,897
1932 ..	1,566,912	208	756,546	..	5,716	69,941	..	2,399,323
1933 ..	1,783,207	198	708,804	..	6,860	70,795	410	2,570,274
1934 ..	2,199,823	370	671,255	..	7,199	43,850	11	2,922,508
1935 ..	3,189,388	642	755,899	..	12,687	63,713	..	4,022,329

(a) Year ended 30th June.

* Further details in regard to zinc are given in § 7 hereinafter.

(ii) *New South Wales.* The figures quoted above for New South Wales for the year 1935 include silver to the value of £8,110 and silver-lead ore and concentrates valued at £3,181,278. Since the Sulphide Corporation Ltd. ceased smelting operations in 1922 the silver (metal) is obtained chiefly in the refining of gold and copper ores, and there has been no production of lead (pig) in the State. It may be noted here that the bulk of the carbonate and siliceous ore from the Broken Hill field is sent for treatment to Port Pirie in South Australia, while the remainder of the ore is concentrated on the field and then dispatched to Port Pirie for refining. The output for 1935 showed an increase both in quantity and value over that of the previous year and was due to the improvement in the prices of silver and lead.

It must be understood that the totals for New South Wales in the above table represent the *net* value of the product (excluding zinc) of the silver-lead mines of the State. In explanation of the values thus given, it may be noted that, as previously mentioned, the metallic contents of the larger portion of the output from the silver-lead mines in the State are extracted outside New South Wales, and the Mines Department considers, therefore, that the State should not take full credit for the finished product. The real importance of the State as a producer of silver, lead and zinc is thus to some extent lost sight of. The next table, however, which indicates the quantity of these materials locally produced, and the contents by assay of concentrates exported during the years 1903, 1913, 1923 and for each of the last five years, will show, as regards New South Wales, the estimated total production and the value of the metal contents of all ore mined :—

SILVER-LEAD MINES.—NEW SOUTH WALES, TOTAL PRODUCTION.

Year.	Metal Produced within Australia.				Contents of Concentrates Exported.			
	Silver.	Lead.	Zinc.	Value.	Silver.	Lead.	Zinc.	Value.
	oz. fine.	tons.	tons.	£	oz. fine.	tons.	tons.	£
1903 ..	6,489,689	92,293	286	1,790,029	1,736,512	20,706	14,625	308,714
1913 ..	5,908,638	100,432	4,121	2,709,867	8,590,251	117,903	154,149	3,759,691
1923 ..	7,233,236	124,570	41,153	5,797,739	4,834,718	40,906	149,319	1,813,287
1931 ..	6,177,863	129,819	53,832	2,995,029	460,958	13,405	43,629	257,705
1932 ..	5,806,193	131,422	53,200	3,001,005	178,034	1,222	30,164	124,719
1933 ..	7,430,479	158,475	53,956	3,570,886	700,792	18,344	63,840	475,161
1934 ..	7,380,624	153,641	54,629	3,384,193	820,896	22,142	34,016	345,350
1935 ..	8,422,310	180,058	67,666	4,033,192	660,630	11,047	72,285	424,029

The figures given above are quoted on the authority of the Mines Department of New South Wales. Accurate details in regard to gold, copper, antimony, cadmium and cobalt contained in the silver-lead ores are not available. Cadmium was first extracted in 1922 at Risdon, in Tasmania, and in 1935 the amount won from ores of New South Wales origin was given as 219 tons, valued at £48,980. As pointed out previously, credit for the value is not taken in the New South Wales returns, the value accruing to the State being taken as that of the declared value of the concentrates at the time of their dispatch.

(a) *Broken Hill.* Broken Hill, in New South Wales, is the chief centre of silver production in Australia. A description of the silver-bearing area in this district is given in earlier issues of the Official Year Book. (See No. 4, page 506.)

Although the returns are not complete in all cases, the following table relating to the companies controlling the principal mines at Broken Hill will give some idea of the richness of the field :—

SILVER.—BROKEN HILL RETURNS TO END OF 1935.

Mine.	Value of Output to end of 1935.	Dividends and Bonuses Paid to end of 1935
	£	£
Broken Hill Proprietary Co. Ltd.	53,324,074	14,738,291
Broken Hill Proprietary Block 14 Co. Ltd.	4,750,508	670,160
British-Australian Broken Hill Co. Ltd.	5,858,998	821,280
Broken Hill Proprietary Block 10 Co. Ltd.	4,946,989	1,432,500
Sulphide Corporation Ltd. (Central and Junction Mines)	27,905,954	3,481,875
Broken Hill South Ltd.	25,065,159	5,875,000
North Broken Hill Ltd.	20,947,778	6,200,190
Broken Hill Junction Lead Mining Co.	1,185,058	87,500
Junction North Broken Hill Mine	3,511,940	171,431
The Zinc Corporation Ltd.	11,842,299	3,840,873
Barrier South Ltd.	151,517	50,000
Total	159,490,274	37,309,100

The returns relating to dividends and bonuses paid are exclusive of £1,744,000, representing the nominal value of shares in Block 14, British, and Block 10 companies, allotted to shareholders of Broken Hill Proprietary Company. If the output of the companies which were, prior to 1935, engaged in treating the tailings, etc., be taken into consideration, the totals for output and dividends shown in the table would be increased to about 166.8 millions and 40.4 millions respectively. The authorized capital of the various companies amounted to £10,818,000. In 1935 the dividends and bonuses paid amounted to £1,172,000 shared in by the Companies controlling the principal mines as follows : Zinc Corporation, £116,000; North Broken Hill, £385,000; Broken Hill South, £320,000; Broken Hill Proprietary, £336,000, and Sulphide Corporation, £15,000.

(b) *Other Areas.* Silver is found in various other localities in New South Wales, but the production therefrom in 1935 was unimportant : operations were either suspended or restricted to development work and prospecting.

(iii) *Victoria.* The silver produced in 1935 amounted to 3,948 ozs., valued at £642, and was obtained in the refining of gold at the Melbourne Mint.

(iv) *Queensland.* The prices of lead and silver improved during 1935 and the production of silver was well maintained at about 2.4 million fine ozs. Lead, however, again declined by 9,500 tons to 32,952 tons. The production of the mine and works at Mount Isa, which operated throughout the year, amounted to 2,351,135 ozs. of silver and 32,900 tons of lead. The production for the rest of the State was very small.

(v) *South Australia.* Silver ore has been discovered at Mitalie and Poonana, in the Franklin Harbour district, also at Mount Malvern and Olvaster, near Rapid Bay, and in the vicinity of Blinman and Farina, at Baratta, and elsewhere. There has been no production in recent years.

(vi) *Western Australia.* The quantity of silver obtained as a by-product and exported in 1935 was 79,879 ozs., valued at £12,687.

(vii) *Tasmania.* The silver produced in 1935 amounted to 323,901 ozs., valued at £42,323, and the lead to 1,488 tons, valued at £21,390. This represents a slight increase in the production of silver and a small decline in lead. About 191,000 ozs. of the total silver output were contained in silver-lead, while 133,000 ozs. were contained in the blister copper produced by the Mount Lyell Co.

(viii) *Northern Territory.* A rich deposit of silver-lead and copper ore was located in 1930 at the Jervois Range about 200 miles east of Alice Springs. Development is, however, hindered by transport difficulties and lack of permanent water. Rich sulphides have been found at Barrow Creek. There was no record of production in 1931, 1932, and 1935. In 1933, 24 tons of silver-lead ores valued at £410 were raised whilst the production amounted to 8 tons valued at £11 in 1934.

3. *Production of Silver in Australia.*—The following table sets out as fully as possible the total production of silver in Australia. It is based on the data published by the Australian Mines and Metals Association and shows the quantity of refined silver recovered by smelters and mints and the estimated metallic contents of ores and concentrates exported :—

SILVER.—PRODUCTION IN AUSTRALIA.

Particulars.	1914.	1924.	1934.	1935.	1936.
	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.
Metal recovered by—					
Smelters	4,020,974	7,529,845	8,583,133	8,880,823	8,360,673.
Mints	226,019	101,368	91,416	103,127	138,001
Metallic contents in ores and concentrates exported ..	8,901,212	2,242,170	2,579,082	2,998,435	3,477,416
Total Production ..	13,148,135	9,873,383	11,253,631	11,982,385	11,976,090

4. *World's Production.*—The world's production of silver during the last five years for which particulars are available is estimated to have been as follows :—

SILVER.—WORLD'S PRODUCTION.

Total.	1931.	1932.	1933.	1934.	1935.
World's production in 1,000 fine ozs. ..	201,042	171,600	172,000	192,000	222,000

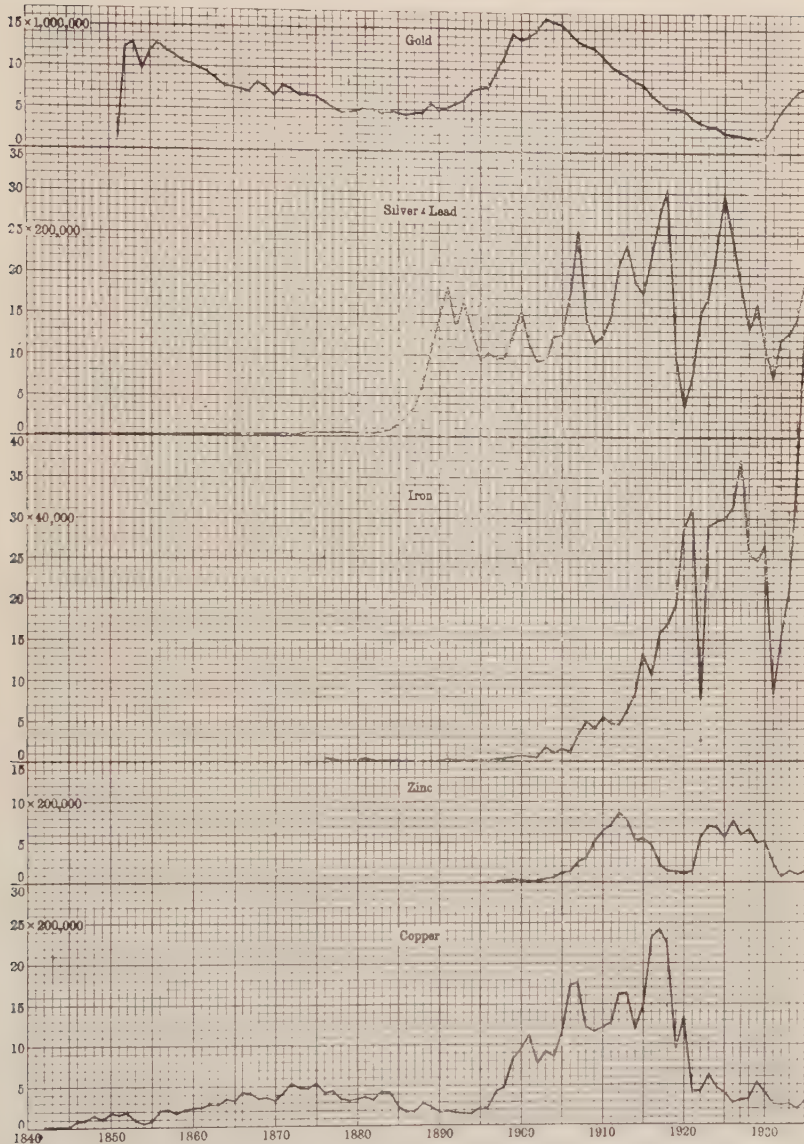
The world's production of silver in millions of fine ounces during the years 1915, 1925 and 1935 amounted respectively to 185.4, 245.2 and 222.0, of which Australia contributed 9.6 million, 10.9 million and 12.0 million fine ounces, or 5.2 per cent., 4.4 per cent. and 5.4 per cent. respectively. The production for Australia includes an estimate of the silver contents of the ores, bullion and concentrates exported.

Arranged in order of importance the estimated yields in 1935 from the chief silver producing countries were as follows :—

SILVER.—PRODUCTION, CHIEF COUNTRIES, 1935.

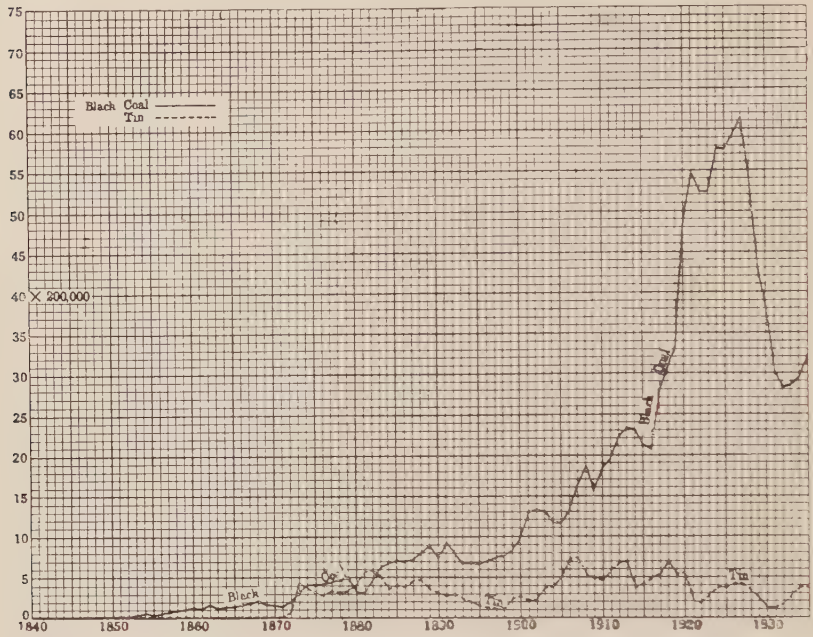
Country.	Production.	Country.	Production.
	Fine ozs. ('000 omitted.)		Fine ozs. ('000 omitted.)
Mexico	75,587	Germany	6,751
United States	48,511	India	5,850
Canada	16,619	Soviet Union	3,900
Peru	15,800	Belgian Congo	3,800
Australia	11,982	Yugoslavia	2,060
Japan	8,154	Spain and Portugal	1,450
Bolivia	7,951	Union of South Africa	1,042

VALUES OF PRINCIPAL MINERALS PRODUCED—AUSTRALIA, 1840 TO 1935.

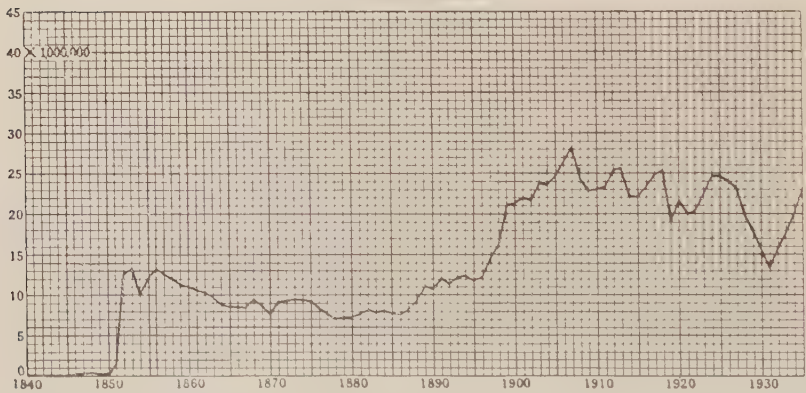


EXPLANATION.—The values shown are those of the total Australian production of certain of the most important minerals in successive years from 1840 onwards.

The base of each small square represents an interval of one year, and the vertical height represents in the case of gold £1,000,000; in the case of silver and lead, zinc and copper £200,000; and in the case of iron £40,000.

VALUES OF PRINCIPAL MINERALS PRODUCED—AUSTRALIA, 1840 TO 1935—*continued*.

Total Mineral Production



EXPLANATION.—The values shown are those of the total Australian production of certain of the most important minerals in successive years from 1840 onwards.

The base of each small square represents an interval of one year, and the vertical height represents in the case of coal and tin £200,000, and in the case of total mineral production £1,000,000.

5. **Prices of Silver, Lead and Zinc.**—In view of the close association in Australia, particularly in New South Wales, of ores containing these metals, the average prices of each metal during the last five years have been incorporated in the table hereunder :—

PRICES OF SILVER, LEAD AND SPELTER.

Metal.	1932.			1933.			1934.			1935.			1936.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Silver (Standard)															
per oz.	0	1	5.84	0	1	6.14	0	1	9.22	0	2	4.9.	0	1	8.07
Lead .. per ton	12	0	6	11	16	4	11	1	0	14	5	7	17	12	6
Spelter per ton	13	13	10	15	14	10	13	15	6	14	3	0	15	0	8

A marked recovery in the price of lead and spelter has been noted during recent months. Between November, 1936, and March, 1937, the price of lead rose from about £22 to £33 per ton whilst that of spelter rose from £16 to more than £33 per ton. Prices receded somewhat following that month and by June, 1937 were quoted at £23 and £22 per ton respectively. Silver at that date was about 18s. 8½d. per oz.

6. **Employment in Silver, Lead and Zinc Mining.**—The average number of persons employed in mining for these metals during each of the last five years is given below :—

SILVER, ETC., MINING.—PERSONS EMPLOYED.

Year.	N.S.W. (a)	Q'land.	S. Aust.	W. Aust. (b)	Tasmania. (a)	Nor. Ter.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1931 ..	2,812	351	2	15	299	4	3,483
1932 ..	3,145	443	1	16	932	1	4,538
1933 ..	3,197	553	..	10	962	..	4,722
1934 ..	3,237	523	..	4	958	1	4,723
1935 ..	3,536	544	..	..	1,046	..	5,126

(a) Silver, lead and zinc.

(b) Principally lead and silver-lead ore.

With the development of the great silver-lead field at Mount Isa in Queensland and a recovery in the price of metal, it is expected that the employment returns for that State will in future assume considerable importance. The actual number of men employed at the end of 1935 on this field totalled 1,138, including 531 engaged in mining operations, 78 in milling and 179 in smelting.

§ 5. Copper.

1. **Production.**—The production of copper in the various States has been influenced considerably by the ruling prices, which have undergone extraordinary fluctuations. In 1923 when copper was worth £65 18s. 1d. per ton the production of metal amounted to 17,012 tons exclusive of 4,534 tons of ore. During the three years ended 1934 the price averaged little more than £31 per ton and the production dropped to an average of about 13,800 tons. Production responded to a slight improvement in price during 1935 and amounted to 17,000 tons. The value of the local production as reported and credited to the mineral industry for the years 1931 to 1935 is shown hereunder. Quantities for Australia as a whole as returned by the several State Mines Departments are appended on separate lines at the foot of the table :—

COPPER.—PRODUCTION.

State.	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
New South Wales ..	23,948	21,785	26,775	25,398	30,071
Queensland ..	126,342	108,858	105,031	95,903	101,489
South Australia ..	934	..	2,928	8,475	11,065
Western Australia ..	..	..	1,132	..	..
Tasmania ..	416,309	399,762	395,286	267,342	464,007
Northern Territory (a)	25	137	..	..	..
Australia ..	567,558	530,542	531,152	397,118	606,632
Ingot, Matte, etc. .. tons	13,453	14,763	14,493	12,003	16,992
Ore .. tons	79	20	..	96	56

(a) Year ended 30th June.

2. Sources of Production.—(i) *New South Wales*. The production during 1935 amounted to 800 tons of electrolytic copper and 56 tons of ore, the latter being exported overseas. Practically all of the copper was obtained at Port Kembla from the treatment of 1,963 tons of copper matte forwarded by the Broken Hill Smelters and derived from Broken Hill silver-lead ores. Copper mines operated in the State during the year but the outputs were very small. Since 1919 the production in New South Wales has rarely exceeded 1,000 tons, whilst previously it had ranged from 2,500 tons in 1915 to 10,600 tons in 1911.

(ii) *Queensland*. The yield in this State amounted in 1935 to 2,900 tons valued at £101,489, and showed a serious decline as compared with 1920 when nearly 16,000 tons valued at £1,552,000 were raised. The falling-off in the yield in recent years was due primarily to the low prices realized for copper. Returns from the chief producing areas in 1935 were as follows: Cloncurry, 1,417 tons, £49,609; Herberton, 148 tons, £5,174; and Mount Morgan, 1,166 tons, £40,809.

(iii) *South Australia*. Deposits of copper are found over a large portion of South Australia and its total production easily exceeds that of any other State. Compared with the output of previous years the production of South Australia has dwindled during recent times to very small dimensions, and is now exceeded by that of Tasmania and Queensland. A short account of the discovery, etc., of some of the principal mining areas, such as Kapunda, Burra Burra, Wallaroo and Moonta, was given in earlier issues of the Official Year Book. The Moonta and Wallaroo copper field, which was opened in 1860, was worked continuously and up to the close of 1931, £20,500,000 of copper was produced. Since 1933 the field has been worked on a co-operative basis known as the Moonta Mining Scheme which was referred to in previous issues of the Official Year Book. Plans for the development of this area are contemplated by private interests.

(iv) *Western Australia*. Thirty-five tons of copper valued at £1,132 were recovered in this State during 1933, but no production has since been recorded.

(v) *Tasmania*. The quantity of copper produced in Tasmania during 1935 was 13,036 tons, valued at £464,007, the whole of the production being by the Mount Lyell Mining and Railway Co. Ltd. This Company treated 59,600 tons of ore and concentrates and produced 13,136 tons of blister copper, containing copper, 13,036 tons; silver, 132,857 oz.; and gold, 7,030 oz., the whole being valued at £541,520.

(vi) *Northern Territory*. Copper has been found at various places, but lack of capital, low prices and difficulty of transport prevent the development of the deposits. There was no production in 1935.

3. Prices.—The great variation in price that the metal has undergone is shown in the following table, which gives the average price in London and New York during each of the last five years. The figures are given on the authority of *The Mineral Industry* :—

COPPER.—PRICES, LONDON AND NEW YORK.

Year.				Average London Price per Ton Standard Copper.	Average New York Price in Cents per lb. Electrolytic Copper.
				£	Cents.
1931	..	..	..	38.34	8.12
1932	..	..	..	31.68	5.56
1933	..	..	..	32.52	7.02
1934	..	..	..	30.28	8.43
1935	..	..	..	31.87	8.65

As evidence of the tremendous variation in the price of copper it may be noted that in December, 1916, the average London price of standard copper was £145.32 per ton, while in June, 1927, it was quoted at £54.03. In 1930 the average price was about the same, i.e., £54. During the succeeding five years the price averaged nearly £53 per ton but by June, 1937, it had risen to more than £60. If the latter price holds it will lead to considerable activity in copper mining in Australia.

4. **World's Production of Copper.**—The world's production of copper during the five years 1931-1935 is estimated to have been as follows. The figures have been taken from the statistical summary prepared by the Imperial Institute.

COPPER.—WORLD'S PRODUCTION.

Year.	1931.	1932.	1933.	1934.	1935.
World's production—tons ..	1,328,600	881,000	1,040,000	1,300,000	1,480,000

The yields from the chief copper-producing countries in 1935 were as follows :—

COPPER.—PRODUCTION, CHIEF COUNTRIES, 1935.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States	372,646	Germany	55,100
Chile	255,821	Yugoslavia	38,384
Canada	172,678	Mexico	37,592
Rhodesia	143,501	Peru	29,907
Belgian Congo	105,981	United Kingdom	12,400
Japan	68,727	Union of South Africa	11,449
Soviet Union	60,000	Australia	11,168

During the five years ending in 1935 the share of the United States in the world's copper production amounted to over 24 per cent., while the Australian proportion was only about 1 per cent.

A recovery in the world consumption of copper and the consequential reduction of stocks was recorded during 1935. In addition, prices showed an upward tendency. These factors are reflected in the increased production which is shown in nearly all of the copper producing countries of the world.

5. **Employment in Copper Mining.**—The number of persons employed in copper mining during each of the last five years was as follows :—

COPPER MINING.—PERSONS EMPLOYED.

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1931	35	287	61	..	1,442	3	1,828
1932	(a) 3	278	51	..	1,518	3	1,853
1933	(a) 13	175	54	..	1,483	1	1,726
1934	4	151	45	..	1,471	..	1,671
1935	7	170	54	..	1,758	..	1,989

(a) No production from copper mines.

In 1917 over 9,000 persons were engaged in copper mining.

§ 6. Tin.

1. **Production.**—The price of tin during 1935 was nearly equal to the high level recorded in 1934 and production responded accordingly. Compared with the latter year, the yield of tin increased by 279 tons during 1935. The next table shows the value of the production as reported to the Mines Departments in each of the States during the five years 1931 to 1935. A separate line is appended showing the recorded tonnages for Australia during each of the specified years :—

TIN.—PRODUCTION.

State.	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
New South Wales	103,111	120,124	218,244	328,130	287,890
Victoria	440	404	1,350	3,886	14,475
Queensland	35,744	66,174	123,620	179,404	187,234
Western Australia	3,945	3,295	4,557	6,765	8,820
Tasmania	70,634	109,767	190,041	219,246	258,919
Northern Territory (a) ..	2,331	2,322	2,519	9,566	6,036
Total	216,205	302,086	540,331	746,997	763,383
Tonnage	1,938	2,396	3,020	3,323	3,602

(a) Year ended 30th June.

2. **Sources of Production.**—(i) *New South Wales.* The production in 1935 was estimated at 1,075 tons of ingots valued at £284,764 and 21 tons of concentrates valued at £3,126 were exported overseas. A large proportion of the output in this State is obtained in normal years by dredging, principally in the New England district, the quantity so won in 1935 being 502 tons, valued at £87,790. The Tingha area was the principal contributor to the output in 1935, the yield from this district comprising 424 tons of concentrates. Amongst other areas, Emmaville produced 257 tons, Ardlathan 269 tons, while the lode mines at Torrington returned a yield of 166 tons.

(ii) *Victoria.* The production of tin in Victoria is small, being chiefly obtained by dredging in the Beechworth district and by mining in the Toora district in Gippsland. The production in 1935 amounted to 88 tons, valued at £14,475.

(iii) *Queensland.* The chief producing districts in Queensland during 1935 were Herberton, 801 tons, valued at £123,923; Cooktown, 55 tons, £9,203; Stanthorpe, 209 tons, £34,696; Chillagoe, 15 tons, £2,411 and Kangaroo Hills, 104 tons, £16,404. The total production, 1,189 tons, £187,234, showed an advance on that for 1934, but it is far below that of the early years of this century, when the production ranged between 2,000 and 5,000 tons per annum.

(iv) *Western Australia.* The export of tin from the State in 1935 amounted to 60 tons, valued at £8,829. This quantity won during the year was obtained in the Pilbara and Greenbushes fields. The Mines Department proposes to test certain areas by boring for deep leads, but these operations were not commenced in 1935.

(v) *Tasmania.* For 1935 the output amounted to 1,131 tons of tin, valued at £258,919, an increase of 179 tons in quantity and £39,673 in value over the return for the previous year. Operations at Mount Bischoff, the principal producer, were mainly carried on by the tributers. The development of the tin deposits received more attention than any other mineral during 1935. New capital has been introduced and preparations made for large scale operations. These consist of the installation of machinery, water conservation and constructional work generally. It is expected that the output will be increased considerably when the production stage is reached.

(vi) *Northern Territory*. The production for the year amounted to 38 tons of concentrates valued at £6,036. Thirty-one tons were produced on the Maranboy field and the balance was made up of small parcels from various other localities.

3. *World's Production*.—According to *The Mineral Industry* the world's production of tin during each of the last five years was as follows:—

TIN.—WORLD'S PRODUCTION.

1931.	1932.	1933.	1934.	1935.
Tons.	Tons.	Tons.	Tons.	Tons.
147,900	96,100	89,000	117,000	146,500

The world production of tin showed a considerable increase in 1935 and is due principally to the increased output of the chief producing countries—Malaya, Bolivia, Netherlands East Indies, Siam and Nigeria. These countries produced more than three-quarters of the world's total production in 1935. A further extension of the agreement to control production and export of tin has been effected by these countries for a period ending in 1941. There has been no concerted restriction of production in Australia.

The yields from the chief producing countries in 1935 were as follows:—

TIN.—PRODUCTION, CHIEF COUNTRIES, 1935.

Country.	Production.	Country.	Production.
	Tons.		Tons.
Malaya	45,919	Belgian Congo	6,447
Bolivia	27,168	India	4,102
Netherlands East Indies	24,613	Australia	3,602
Siam	9,779	Great Britain	2,053
China	9,742	Indo-China	1,421
Nigeria	6,949	Union of South Africa	594

Australia's share of the world's tin production, estimated at 146,500 tons in 1935, would appear to be a little less than 3 per cent.

4. *Prices*.—The average price of the metal in the London market for the years 1931 to 1936 was as follows:—

TIN.—PRICES, LONDON.

Year.	Average Price Per Ton.	Year.	Average Price Per Ton.
	£ s. d.		£ s. d.
1931	118 9 1	1934	230 7 5
1932	135 18 10	1935	225 14 5
1933	194 11 11	1936	(a) 204 12 8

(a) Price in June, 1937, £249 19s. 11d. per ton.

The price of tin reached the low level of £118 per ton in 1931 compared with £179 per ton, the average for the quinquennium 1909-13. Prices have since recovered and the industry has made progress during recent years.

5. **Employment in Tin Mining.**—The number of persons employed in tin mining during the last five years is shown below :—

TIN MINING.—PERSONS EMPLOYED.

Year.	N.S.W.	Victoria. (a)	Q'land.	W. Aust.	Tas.	Nor. Ter.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1931	994	3	548	17	625	29	2,216
1932	1,201	27	597	41	870	27	2,763
1933	1,448	..	818	63	1,007	33	3,369
1934	1,903	10	1,214	73	1,247	120	4,567
1935	1,807	5	1,122	58	1,452	30	4,474

(a) The tin produced in Victoria was raised by a dredging company operating primarily for gold

§ 7. Zinc.

1. **Production.**—(i) *New South Wales.* (a) *Values Assigned.* The production of zinciferous concentrates is confined chiefly to the Broken Hill district of New South Wales, where zincblende forms one of the chief constituents in the enormous deposits of sulphide ores. During the earlier years of mining activity on this field a considerable amount of zinc was left in tailings, but from 1909 onwards improved methods of treatment resulted in the profitable extraction of the zinc contents of the accumulations at the various mines.

As the metallic contents of the bulk of the concentrates, etc., produced in the Broken Hill district are extracted outside New South Wales, the mineral industry of that State is not credited by the Mines Department with the value of the finished product. During 1935 the zinc concentrates produced amounted to 243,604 tons, valued at £230,890. Portion of the zinc concentrates produced is treated at Risdon in Tasmania, and the balance is exported overseas.

(b) *Local and Foreign Extraction.* A statement of the quantity of zinc extracted in Australia and the estimated zinc contents of concentrates exported overseas during the five years 1931 to 1935 will be found in § 17 hereinafter.

(ii) *Queensland.* The production of zinc was reported in the Cloncurry district of Queensland during 1935 and amounted to 4,411 tons valued at £68,863. This was the first production recorded since 1926, when 200 tons of metal valued at £6,827 were produced.

(iii) *South Australia.* Zinc is known to exist in various localities in South Australia, but there has been no production during recent years.

(iv) *Tasmania.* The production of zinc ores remained suspended during 1935. Developmental work on the Mount Read and Roseberry districts was continued during that period and production which commenced in 1936 amounted to 18,769 tons valued at £283,175.

The Electrolytic Zinc Co. at Risdon operated during 1935 on raw materials obtained wholly from Broken Hill in New South Wales. Production amounted to 67,666 tons of slab zinc valued at £1,244,840, and 219 tons of cadmium, valued at £48,980.

2. **World's Production.**—According to *The Mineral Industry* the world's production of zinc during the five years 1931–35 was as follows :—

ZINC.—WORLD'S PRODUCTION.

1931.	1932.	1933.	1934.	1935.
Tons. 989,000	Tons. 780,000	Tons. 986,000	Tons. 1,162,000	Tons. 1,328,000

The yields from the chief producing countries in 1935 were as given hereunder, the figures referring to slab zinc produced in the various countries, irrespective of the source of the ore. In common with the other industrial metals zinc suffered from a combination of low prices and reduced demand during the years 1931 and 1932. Compared with the last-named year, world production and consumption showed a substantial increase during the past three years, despite the fact that prices still remained at a low level. The International Zinc Cartel which was organized in 1931 continued to operate until December, 1934, when it automatically went out of existence.

ZINC.—PRODUCTION, CHIEF COUNTRIES, 1935.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States	385,000	Soviet Union	45,300
Belgium	179,700	Norway	44,300
Canada	133,000	Mexico	39,400
Australia	122,400	Japan	33,200
Germany	122,200	Italy	25,800
Poland (a)	83,600	Rhodesia	20,600
Great Britain	60,400	Netherlands	13,500
France	50,600	Spain	7,500

(a) Including Upper Silesia.

The figures for Australia have been taken from returns supplied by the Australian Mines and Metals Association. On a world's production of 1,328,000 tons Australia's output of 122,400 tons represents 9 per cent.

3. Prices.—Information regarding prices of zinc will be found in the table in § 4 par. 5, *ante*.

§ 8. Iron.

1. **General.**—The wide distribution of iron ore throughout Australia has long been known, extensive deposits having been discovered at various places throughout the States, but the conversion of these deposits to the production of iron and steel is, at present, confined to New South Wales.

2. **Production.**—(i) *New South Wales.* The production from ores mined in New South Wales in 1935 amounted to 4,580 tons, valued at £18,320. This is the first occasion since 1929 that ore of New South Wales origin has been used in the production of pig iron in that State. For many years now the chief source of supply has been South Australia. The figures quoted, therefore, do not represent the total production of pig iron.

Small quantities of iron oxide produced in New South Wales are used by the various gasworks for purifying gas, and also in the manufacture of paper, and for pigments. These supplies are drawn chiefly from the deposits in the Port Macquarie Division. During 1935 the iron oxide raised amounted to 4,546 tons, valued at £2,546. Ironstone flux amounting to 2,432 tons valued at £950 was raised in the Goulburn Division during 1933. This is the only production recorded since 1922.

(ii) *South Australia.* The production from the deposits worked by the Broken Hill Pty. Co. Ltd., at Iron Knob and at Middlebank reached its maximum in 1935, when 1,868,719 tons of ore were raised valued at £2,149,027. The extent of the recovery that has been made in the iron and steel industry may be gauged from a comparison with the output of 289,179 tons in 1931.

(iii) *Western Australia.* Development works were in progress on the deposits at Yampi Sound but these have not yet reached the production stage.

(iv) *Tasmania.* The production of iron pyrites during 1935 amounted to 25,555 tons valued nominally at £1 per ton. This is produced as a by-product from the Mount Lyell flotation plant and is exported to the mainland, where the sulphur contents are used in the manufacture of chemical fertilizers displacing sulphur imported from overseas. A marked increase in the production for 1935 is noted compared with that of 1934, 12,030 tons, 1933, 1,498 tons and 1932, 274 tons. Apart from this pyritic ore there has been no production of iron ore since the year 1908.

(v) *Other States.* Reference to the iron ore deposits in the other States will be found in preceding issues of the Official Year Book (see No. 22, page 779).

3. **Iron and Steel Bounties.**—During the year 1935-36 the bounties paid under the Iron and Steel Products Bounty Act on articles manufactured from locally produced materials were as follows: wire-netting, £10,659; traction engines, £9,814.

4. **World's Production of Iron and Steel.**—(i) *General.* The Australian production of iron and steel at present forms a very small proportion of the world's output. According to *The Mineral Industry*, the world's production of each commodity in the years specified distributed over principal countries was as follows:—

PIG IRON AND STEEL.—WORLD'S PRODUCTION.

Country.	Pig Iron.			Steel Ingots and Castings.		
	1933.	1934.	1935.	1933.	1934.	1935.
	Thousands of Tons.			Thousands of Tons.		
United States ..	13,346	16,139	21,373	23,232	26,468	34,550
Germany ..	5,267	8,742	12,539	7,586	11,886	16,090
Soviet Union ..	7,250	10,329	12,493	6,920	9,394	12,520
United Kingdom ..	4,124	8,742	6,426	7,003	8,859	9,842
France ..	6,327	6,155	5,799	6,520	6,148	6,264
Belgium ..	2,744	2,907	3,060	2,689	2,900	2,960
Japan ..	2,032	2,404	2,716	3,047	3,742	4,532
Luxemburg ..	1,888	1,955	1,872	1,845	1,932	1,837
Saar Territory ..	1,592	1,826	(a)	1,676	1,950	(a)
India ..	913	1,297	1,056	694	798	912
Czechoslovakia ..	499	590	811	747	936	1,197
Italy ..	517	521	622	1,784	1,696	2,171
Canada ..	220	407	600	408	759	936
Australia ..	350	430	572	375	461	615
Sweden ..	319	523	566	628	858	895
Poland ..	306	382	394	817	844	946
Spain ..	347	348	350	468	407	560
China ..	200	225	250	40	50	60
Austria ..	88	134	193	226	309	364
Total—All Countries	48,781	64,240	72,111	67,081	80,797	97,887

(a) Included with Germany.

In regard to both iron and steel the figures for world production reached an exceptionally low ebb in 1932, namely, pig iron, 39,275 tons; steel, 50,029 tons. In 1933, practically all steel producing nations recorded increased production which has since continued to expand. The principal producers in Australia are the Broken Hill Proprietary and the Australian Iron and Steel Co., the former situated at Newcastle and the latter at Port Kembla in New South Wales. Additional plant has been authorized at both of these works in order to meet the increasing demand for steel in Australia.

(ii) *Australia.* The production of steel and pig iron in New South Wales, which is the only producing State, is shown during each of the last ten years.

PIG IRON AND STEEL.—AUSTRALIAN PRODUCTION.

Year ended 30th June—	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year ended 30th June—	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1927 ..	468,899	410,728	360,212	1932 ..	190,132	221,488	178,740
1928 ..	428,404	495,590	350,941	1933 ..	336,246	392,666	295,523
1929 ..	461,110	432,773	353,921	1934 ..	487,259	518,326	431,765
1930 ..	308,369	314,917	256,696	1935 ..	698,493	696,861	585,838
1931 ..	232,783	228,363	188,708	1936 ..	783,233	820,395	671,244

§ 9. Other Metallic Minerals.

Tungsten ores—wolfram and scheelite—occur in several of the States, in the Northern Territory and on King Island in Bass Strait, the last-named being the subject of an investigation in 1934. On account of the low prices during recent years, mining activities have been restricted and production intermittent. During 1935, 8,061 cwt. of wolfram valued at £48,307 were raised in Australia, of which New South Wales produced 1,095 cwt. valued at £5,694; Queensland, 480 cwt., £2,888; Tasmania, 4,640 cwt., £29,345; and Northern Territory, 1,846 cwt., £10,380. New South Wales and Queensland were the only States in which the production of scheelite was recorded in 1935; the quantities raised amounted to 50 cwt. and 22 cwt. valued at £381 and £120 respectively. With a recovery in prices, Australia will probably be an important contributor to the world's output of tungsten ore.

Detailed information in regard to the occurrence and production of other metallic minerals in each of the States will be found in Official Year Book No. 22, pp. 780-3 and preceding issues.

§ 10. Coal.

1. *Production in each State.*—An account of the discovery of coal in each State will be found in preceding issues of the Official Year Book. (See No. 3, pp. 515-6.) The quantity and value of the production in each State and in Australia during the years specified are given in the table hereunder:—

COAL.—PRODUCTION.

Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
QUANTITY.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1913 ..	10,414,165	593,912	1,037,944	..	313,818	55,043	12,414,882
1921 ..	10,793,387	514,859	954,763	..	468,817	66,476	12,798,302
1931 ..	6,432,382	571,342	841,308	..	432,400	123,828	8,401,260
1932 ..	6,784,222	432,353	841,711	..	415,719	111,853	8,585,858
1933 ..	7,118,437	523,000	875,567	..	458,399	116,573	9,091,976
1934 ..	7,873,180	356,958	956,558	..	500,343	113,633	9,800,672
1935 ..	8,698,579	476,495	1,051,978	..	537,188	123,714	10,887,954
VALUE. (b)							
	£	£	£	£	£	£	£
1913 ..	3,770,375	274,371	403,767	..	153,614	25,367	4,627,494
1921 ..	9,078,388	603,323	831,483	..	497,117	63,440	10,083,757
1931 ..	4,607,343	362,284	699,926	..	336,178	98,004	6,103,735
1932 ..	4,376,453	274,993	684,555	..	270,630	86,733	5,693,274
1933 ..	4,306,799	328,704	693,383	..	289,806	85,848	5,704,540
1934 ..	4,541,923	215,413	752,303	..	278,704	81,262	5,860,605
1935 ..	4,887,341	282,253	843,034	..	318,013	86,204	6,410,845

(a) Exclusive of brown coal, shown in next table.

(b) At the pit's mouth.

The figures for Victoria already quoted are exclusive of brown coal, the quantity and value of which for the years specified were as follows. The reduced output for 1935 is attributable to floods which retarded production during the early months of the year.

BROWN COAL.—PRODUCTION, VICTORIA.

Year.	Quantity.	Value. (a)	Year.	Quantity.	Value. (a)
	Tons.	£		Tons.	£
1913	2,984	569	1932	2,612,512	274,903
1921	79,224	31,074	1933	2,580,060	271,360
1926	957,935	188,899	1934	2,617,534	264,192
1930	1,831,507	173,713	1935	2,221,515	317,444

(a) Cost of Production.

2. Distribution and Production of Coal in each State. 1) *New South Wales*.—The coal deposits of New South Wales constitute the most important and extensively worked in Australia. The principal fields are known as the Northern, Southern and Western, and are situated at Newcastle, Bulli and Lithgow respectively.

The coal from the various districts differs considerably in quality—that from the Northern district being especially suitable for gas-making and household purposes, while the product of the Southern and Western is an excellent steaming coal. At the present time the Greta coal seams in the Northern division are being extensively worked between West Maitland and Cessnock, and this stretch of country, covering a distance of 15 miles, is now the most important coal-mining district in Australasia.

The table hereunder gives the yields in each of the three districts during the five years 1931 to 1935 :—

COAL.—PRODUCTION IN DISTRICTS, NEW SOUTH WALES.

District.	1931.	1932.	1933.	1934.	1935.
	Tons.	Tons.	Tons.	Tons.	Tons.
Northern	4,161,798	4,398,253	4,651,483	5,227,647	5,679,802
Southern	981,964	1,112,686	1,218,014	1,344,669	1,558,282
Western	1,288,620	1,273,283	1,248,940	1,300,864	1,460,495
Total	6,432,382	6,784,222	7,118,437	7,873,180	8,698,579
Total Value (a) £ ..	4,607,343	4,376,453	4,306,799	4,541,923	4,887,341
Average value per ton (a) ..	14s. 4d.	12s. 11d.	12s. 1d.	11s. 6d.	11s. 3d.

(a) At the pit's mouth.

During the five years ended 1927, the average annual production of coal in New South Wales exceeded 11,000,000 tons, but in 1928 the output declined to 9,448,000 tons owing to a reduction of oversea and interstate orders. A prolonged stoppage of work in the Northern mines during the next two years and the advent of the industrial depression reduced the yield to 6,430,000 tons in 1931 since when it has gradually risen to 8,699,000 tons in 1935. Of the total quantity of coal won in New South Wales since the inception of operations to the end of the year 1935, viz., 394,000,000 tons, about 267,750,000 or 68 per cent. was obtained in the Northern District, 81,500,000 tons or 21 per cent. came from the Southern District, and 45,000,000 tons or 11 per cent. was contributed by the mines in the Western District.

(ii) *Victoria. (a) Black Coal.* The deposits of black coal in Victoria occur in the Jurassic system, the workable seams, of a thickness ranging from two feet three inches to six feet, being all in the Southern Gippsland district.

The output of black coal in Victoria during the last five years was as follows :—

BLACK COAL.—PRODUCTION, VICTORIA.

Year.	State Coal Mine.	Other Coal Mines.	Total Production.	Total Value. (a)	Average Value per ton. (a)
	Tons.	Tons.	Tons.	£	s. d.
1931	532,003	39,339	571,342	362,284	12 8
1932	359,011	73,342	432,353	274,903	12 9
1933	444,868	78,132	523,000	328,704	12 7
1934	268,861	88,097	356,958	215,413	12 1
1935	393,532	82,963	476,495	282,253	11 10

(a) At the pit's mouth.

(b) *Brown Coal.*—(1) *General.* Some account of the brown coal deposits and of the operations of the State Electricity Commission in connexion therewith will be found in preceding Official Year Books (*see* No. 22, page 785). The brown coal produced in Victoria in 1935 amounted to 2,221,515 tons, all but 1,000 tons being procured at the State open cut at Yallourn. During the year 1935-36, 2,988,430 tons of brown coal were produced by the State Electricity Commission, of which 1,584,858 tons went to the power station and 1,403,572 tons to the briquette factory.

(2) *Production of Briquettes.* The briquetting plant started operations in November, 1924, and the output for fourteen months ending December, 1925, was 77,915 tons. In 1926 the output was 95,477 tons which had increased to 180,905 tons in 1930 and to 357,601 tons in 1935. The Yallourn briquettes are considered to be equal in quality to those produced in the best German factories.

(iii) *Queensland.* The distribution of production during the year 1935 was as follows :—

COAL PRODUCTION.—QUEENSLAND, 1935.

District.	Production.	District.	Production.
	Tons.		Tons.
Ipswich	496,411	Clermont	84,047
Darling Downs	78,945	Bowen	216,008
Wide Bay and Maryborough	82,707	Mount Mulligan (Chillagoe)	20,320
Rockhampton (Central) ..	64,753	Other	8,787
		Total	1,051,978

The production in 1935 continues to show an improvement on that of recent years but it is still 23 per cent. below the peak production of 1,369,000 tons in 1929. The distribution of the 1,051,978 tons raised in 1935 was as follows : Railway Department, 433,551 tons ; other industries within the State, 543,091 tons ; exported, 75,336 tons. There were 50 collieries operating in the Ipswich district, 7 in the Darling Downs, 8 in the Maryborough area, 4 in Clermont district, 4 in Rockhampton district, 1 in Chillagoe district, 1 at Mount Morgan, 1 at Mackay, and 2 in the Bowen district. State coal mines are in operation at Collinsville in the Bowen field, at Styx in the Central area, and at Mount Mulligan.

(iv) *South Australia.* So far no coal has been worked in South Australia (*see* Official Year Book No. 22, page 786).

(v) *Western Australia.* The production from the six collieries operating on the Collie field amounted in 1935 to 537,188 tons, an increase of nearly 37,000 tons on the return for 1934. The deposits at Wilga again remained unworked during the year.

(vi) *Tasmania*. The production in 1935 amounted to 123,714 tons, about 10,000 tons more than the total for 1934. The industry is being carried on under difficulties owing to restricted markets and consequently operations are not continuous. About 57,000 tons of the total output in 1935 were contributed by the Cornwall Coal Company, 27,000 tons by the Mt. Nicholas Proprietary and 15,000 tons by the Jubilee Company. The three mines combined raised 99,000 tons or 80 per cent. of the total output.

(vii) *Australia's Coal Reserves*. The latest available estimate of the actual and probable coal reserves of Australia is shown in the Report of the Royal Commission on the Coal Industry 1929-1930, and is based upon that prepared by the Coal and Lignites Panel of the Power Survey Sectional Committee of the Standards Association of Australia. The following table shows the actual and probable coal reserves as determined by that Committee :—

ACTUAL AND PROBABLE COAL RESERVES OF AUSTRALIA.

(Millions of Tons.)

State.	Black Coal.	Sub-bituminous and Brown Coal.
New South Wales	13,929	..
Victoria	40	37,000
Queensland	2,238	67
South Australia .. .. .	..	57
Western Australia .. .. .	..	3,500
Tasmania	244	..
Total	16,451	40,624

3. *Production in Various Countries*.—The total known coal production of the world in 1935 amounted to about 1,290 million tons, towards which Australia contributed about 13.1 million tons, or 1 per cent. The following tables show the production of the chief British and foreign countries during each of the last four years where the returns are available :—

COAL PRODUCTION.—BRITISH EMPIRE.

Year.	Great Britain.	British India.	Canada.	Australia.	New Zealand.	Union of S. Africa.
BLACK COAL.						
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1932	208,733,000	20,153,000	7,386,000	8,586,000	928,200	9,764,400
1933	207,112,000	19,780,000	7,619,000	9,002,000	843,800	10,545,200
1934	220,728,000	22,057,000	9,161,000	9,801,000	832,000	12,002,000
1935	222,252,000	23,017,000	9,193,000	10,888,000	825,000	13,360,000
BROWN COAL, LIGNITE.						
1932 .. .. .	..	..	3,093,000	2,612,500	913,700	..
1933 .. .. .	..	..	3,009,000	2,580,000	977,400	..
1934 .. .. .	..	..	2,870,000	2,618,000	1,228,600	..
1935 .. .. .	..	..	3,186,000	2,221,515	1,290,000	..

COAL PRODUCTION.—FOREIGN COUNTRIES.

Year.	Germany.	Austria.	Hungary.	Belgium.	France. (b)	Czecho- slovakia.	Yugoslavia.
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BLACK COAL.

	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1932 ..	103,086,300	217,800	880,700	21,075,000	45,536,000	10,788,000	362,200
1933 ..	107,060,000	235,200	787,000	24,878,400	40,113,200	10,471,800	377,400
1934 ..	122,885,000	246,900	744,000	25,972,000	40,880,000	10,519,000	381,000
1935 ..	140,744,000	246,500	810,000	26,087,000	46,363,000	10,791,000	394,000

Year.	Spain.	Poland.	Nether- lands.	Soviet Union.	Japan.	China. (c)	United States.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1932 ..	6,746,000	28,379,200	12,555,000	63,299,000	27,610,300	18,370,000	321,040,000
1933 ..	5,904,000	26,924,000	12,375,000	74,730,000	32,010,000	18,505,000	312,118,000
1934 ..	5,838,000	28,771,300	12,146,000	92,456,000	35,358,000	20,568,000	371,907,000
1935 ..	6,905,000	28,691,945	11,690,000	102,770,000	34,354,000	12,000,000	375,292,000

BROWN COAL, LIGNITE.

Year.	Germany.	Austria.	Hungary.	Belgium.	France.	Czecho- slovakia.	Yugoslavia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1932 ..	120,709,600	3,055,000	5,837,800	..	975,700	15,608,000	4,042,000
1933 ..	124,792,000	2,966,900	5,815,000	..	1,070,100	14,825,000	3,711,500
1934 ..	135,098,000	2,806,000	6,081,000	..	1,000,000	14,932,000	3,866,000
1935 ..	145,028,000	2,924,000	6,612,000	..	885,000	14,977,000	3,971,000

Year.	Spain.	Poland.	Nether- lands.	Soviet Union.	Japan.	China.	United States.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1932 ..	331,000	32,900	122,000	(a)	106,800	..	(a)
1933 ..	296,000	32,900	95,500	(a)	114,000	..	(a)
1934 ..	294,000	26,000	91,032	(a)	125,000	..	(a)
1935 ..	299,000	18,000	85,000	(a)	(d)	..	(a)

(a) Included with black coal. (b) Exclusive of Saar District, which produced 10,273,200 tons in 1932, 10,394,400 tons in 1933, 11,139,000 tons in 1934, and 1,673,000 tons from 1st January to 17th February, 1935. From this date production has been included with that of Germany. (c) Includes about 300,000 tons of lignite yearly. (d) Not available.

Compared with the previous year the production for 1935 showed a satisfactory increase in practically all of the major producing countries of the world. Any decrease which did occur was very small. The production of the British Empire amounted to 288,000,000 tons in 1935 or an increase of 5,000,000 tons or 1.8 per cent. on that of 1934. The production of foreign countries increased by 20,000,000 tons to 1,000,000,000 tons, or by 2 per cent. in the same period.

4. Exports.—(i) General. The quantity of coal of Australian production (exclusive of bunker coal) exported to other countries in 1935-36 was 397,540 tons, valued at £276,553. New South Wales exported 306,356 tons, Queensland, 1,153 tons, and Victoria,

31 tons. The quantity and value of the oversea exports of Australian coal for the years specified are shown in the appended table :—

COAL.—OVERSEA EXPORTS, AUSTRALIA.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Tons.	£		Tons.	£
1913 (a) ..	2,098,505	1,121,505	1932-33 ..	282,977	281,512
1921-22 ..	1,028,767	1,099,899	1933-34 ..	292,416	269,296
1930-31 ..	387,851	411,612	1934-35 ..	305,139	273,305
1931-32 ..	344,015	341,800	1935-36 ..	307,540	276,553

(a) Calendar Year.

Australian coal taken for bunker purposes during the same years was as follows :—

COAL.—BUNKER, AUSTRALIA.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Tons.	£		Tons.	£
1913 (a) ..	1,647,870	1,018,375	1932-33 ..	562,442	550,277
1921-22 ..	1,498,035	2,178,101	1933-34 ..	523,014	495,032
1930-31 ..	509,303	607,537	1934-35 ..	575,418	544,875
1931-32 ..	506,140	534,897	1935-36 ..	614,333	576,549

(a) Calendar Year.

(ii) *New South Wales.* The total export of coal from New South Wales in 1935 amounted to 2,765,865 tons, valued at £2,367,537, of which 2,387,101 tons, valued at £1,996,078, were shipped from Newcastle. Interstate exports amounted to 1,899,274 tons, valued at £1,581,697, and were divided as follows :—Cargo, 1,584,589 tons, £1,350,181; bunker, 304,685 tons, £231,516. Oversea exports totalled 870,591 tons, valued at £785,840, representing 552,765 tons of bunker coal, valued at £495,377, and 323,826 tons of cargo coal, valued at £290,463.

The distribution of the total output from New South Wales collieries during the last five years was as follows, the particulars given of quantity exported including coal shipped as bunker coal :—

COAL.—DISTRIBUTION OF OUTPUT, NEW SOUTH WALES.

Year.	Exports to Australian Ports. (a)	Exports to Foreign Ports. (a)	Local Consumption.	Total.
	Tons.	Tons.	Tons.	Tons.
1931	1,460,039	802,760	4,169,583	6,432,382
1932	1,501,598	792,750	4,480,874	6,784,222
1933	1,623,840	831,338	4,663,259	7,118,437
1934	1,882,873	807,154	5,183,153	7,873,180
1935	1,889,274	876,591	5,932,714	8,698,579

(a) Including Bunker.

For the period of five years shown in the table above, 23 per cent. of the total output was exported to other States, 11 per cent. was sent overseas, and 66 per cent. was consumed locally.

The figures quoted in the table above are given on the authority of the New South Wales Mines Department.

5. Consumption in Australia.—It is possible from the information available to show with reasonable accuracy the disposal of the coal produced in Australia and the quantity retained for home consumption.

Under normal circumstances the production and consumption of coal move in the same direction, but in times of industrial troubles large consumers may be compelled to rely upon accumulated stocks, and, consequently, annual figures may be thrown out

of alignment. For this reason the following table has been prepared on a quinquennial basis in order to smooth out any departures from the normal:—

PRODUCTION AND UTILIZATION OF COAL, AUSTRALIA.

Average for Five Years ending.

Particulars.

1930-31.

1935-36.

BLACK COAL.

					Tons.		Tons.	
Production of Black Coal (a)—								
Gross	..	..	..	..	11,219,510		9,650,459	
Saleable (a)					10,781,637		9,277,441	
Imports	..	..	..	..	190,932		13,135	
Total Supplies					10,972,569		9,290,576	

The production of coal is ascertained only in calendar years and to relate it to the other factors in the table, it was necessary to have recourse to estimates which in all probability differ but slightly from the actual figures.

6. Prices.—(i) *New South Wales*. The price of New South Wales coal depends on the district from which it is obtained, the northern district coal generally realizing a somewhat higher rate than the southern or western product, although during the last two years the average price in the southern fields was slightly in excess of that prevailing in the northern area. The average price on the mine in each district and for the State as a whole during the last five years was as follows :—

COAL.—PRICES, NEW SOUTH WALES.

Year.	Northern District.		Southern District.		Western District.		Average for State.
	Per ton. s. d.		Per ton. s. d.		Per ton. s. d.		Per ton. s. d.
1931	15	2	13	11	12	0	14 4
1932	13	8	12	5	10	8	12 11
1933	12	9	12	6	9	5	12 1
1934	12	0	12	2	8	10	11 6
1935	11	9	11	10	8	8	11 3

(ii) *Victoria*. In Victoria the average price of coal per ton at the pit's mouth in 1931 was 12s. 8d.; in 1932, 12s. 9d.; in 1933, 12s. 7d.; in 1934, 12s. 1d.; and in 1935, 11s. 10d. These averages are exclusive of brown coal, which in 1935 cost 2s. 10d. per ton to produce.

(iii) *Queensland*. Prices in the principal coal-producing districts during the last five years were :—

COAL.—PRICES, QUEENSLAND.

District.	Value at Pit's Mouth.				
	1931.	1932.	1933.	1934.	1935.
	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.
Ipswich	15 8	15 2	14 9	14 11	15 5
Darling Downs	18 6	18 4	18 2	18 4	18 3
Wide Bay and Maryborough	22 10	22 10	22 7	22 11	23 1
Rockhampton	16 8	17 6	16 6	16 7	16 7
Clermont	14 7	14 0	13 11	12 11	12 5
Bowen	15 1	14 9	13 9	13 6	13 10
Mount Mulligan (Chillagoe)	28 10	27 1	28 5	26 0	29 0
Average for State ..	16 8	16 3	15 10	15 11	16 0

In 1901 the average value at the pit's mouth was 7s. per ton, and the average for the ten years 1901 to 1910 was about 6s. 8d.

(iv) *Western Australia*. The average prices of the Collie (Western Australia) coal during the last five years were : in 1931, 15s. 7d.; in 1932, 13s.; in 1933, 12s. 8d.; in 1934, 11s. 2d.; and in 1935, 11s. 10d. per ton.

(v) *Tasmania*. The average prices per ton of coal at the pit's mouth in Tasmania for the last six years were : in 1930, 15s. 11d.; in 1931, 15s. 10d.; in 1932, 15s. 6d.; in 1933, 14s. 9d.; in 1934, 14s. 4d.; and in 1935, 13s. 11d. per ton.

7. **Prices in the United Kingdom.**—During the five years 1931 to 1935 the average selling value of coal per ton at the pit's mouth in the United Kingdom was: in 1931, 13s. 6d.; in 1932, 13s. 3d.; in 1933, 13s.; in 1934, 12s. 11d.; and in 1935, 13s. per ton.

8. **Employment in Coal Mines.**—The number of persons employed in coal mines, both above and below ground, in each of the producing States is given in the following table for the years 1913, 1923, and for each of the years 1931 to 1935:—

COAL MINES.—PERSONS EMPLOYED.

Year.	New South Wales.	Victoria.		Queensland.	Western Australia.	Tasmania.	Total.
		Black.	Brown.				
	No.	No.	No.	No.	No.	No.	No.
1913	18,843	1,377	(a)	2,548	559	136	23,463
1923	22,969	2,131	(a)	2,662	713	268	28,743
1931	15,667	1,897	259	2,362	752	363	21,300
1932	14,275	1,663	281	2,392	604	381	19,596
1933	13,349	1,517	272	2,448	626	313	18,525
1934	13,465	1,502	319	2,385	624	342	18,637
1935	13,337	1,397	615	2,455	689	340	18,833

(a) Production prior to 1924 was of little importance.

The maximum number employed was attained in 1926 when 31,774 persons were engaged in the coal mines of Australia. Shortly after that year a slackening in the demand for coal and a prolonged cessation of activities on one of the principal fields of New South Wales during 1929 and 1930 seriously affected the figures of employment, while the reduction to their present level of about 18,800 was the result of the reaction of the industry to the industrial depression of recent years. It would also appear that the growth of mechanization has depressed employment in the industry for, notwithstanding an additional output of more than 2,000,000 tons since 1932, the number employed declined by approximately 800. In 1935 the output of coal per employee averaged 578 tons, compared with 418 tons in 1926.

9. **Accidents in Coal Mining.**—(i) *Australia.* The following table gives the number of persons killed or injured, with the proportion per 1,000 employed, and in relation to the quantity of coal raised, this being a factor which must be reckoned with in any consideration of the degree of risk attending mining operations. Although no precise definition of an accident is available it would appear that any disablement from misadventure which rendered the injured unfit for work for fourteen or more days has been uniformly adopted by the State Departments of Mines. A further table gives the rate of fatalities during the last five years.

COAL MINING.—EMPLOYMENT AND ACCIDENTS, 1935.

State.	Persons Employed in Coal Mining.	No. of Persons.		Proportion per 1,000 Employed.		Tons of Coal raised for each Person.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales	13,337	11	61	0.82	4.50	790,780	142,600
Victoria	2,012	..	5	..	2.49	..	539,602
Queensland	2,455	2	197	0.81	80.24	525,989	5,340
Western Australia	689	..	287	..	416.55	..	1,872
Tasmania	340	..	..	..	..	..	..
Total	18,833	13	550	0.69	29.21	837,535	23,835

The next table shows the average number of miners employed, number of fatalities, and rate per 1,000 during the quinquennium 1931-35 :—

COAL MINING.—FATALITIES, 1931 TO 1935.

State.	Average No. of Coal Miners Employed.	Average No. of Fatal Accidents.	Rate per 1,000 Employed.
New South Wales	14,020	11.20	0.80
Victoria	1,943	0.60	0.31
Queensland	2,408	1.20	0.50
Western Australia	659	0.40	0.62
Tasmania	348	1.00	2.87
Total	19,378	14.40	0.72

(ii) *Other Countries.* According to the report of the Chief Inspector of Mines, the average death rate per 1,000 miners from accidents in coal mines in Great Britain during the quinquennium 1931-35 was 1.10, the rates varying between 1.35 in 1934 and 0.98 in 1931, while the rate for Australia for the same period was 0.72. In the United States during the two years 1933 and 1934 the death rate per 1,000 employees averaged 3.5 for bituminous coal miners, and 3.6 for anthracite miners. Rates for other coal-producing countries for the same period were—Canada, 1.6; Union of South Africa, 2.6; Germany, 1.7; Spain, 1.3; Poland, 1.6; Belgium, 1.2; and France, 0.8. In comparing these rates, allowance must be made for the circumstance that the methods of calculation are not identical in all countries.

§ 11. Coke.

Notwithstanding the large deposits of excellent coal in Australia, the production of coke was limited to about 250,000 tons prior to the war. This was below local requirements and necessitated a fairly considerable import from abroad. During recent years, however, a high standard of excellence has been attained in the local product and imports have almost ceased, while Australian coke is being shipped to New Zealand and other islands in the Pacific. For the year 1935-36 the coke imported amounted to 2,230 tons, of which 227 tons were obtained from the United Kingdom and 2,003 tons from Germany, Western Australia being the chief importing State. The quantity exported was 15,866 tons, valued at £23,331, of which 13,342 tons, valued at £17,886, was sent to New Caledonia.

The table hereunder gives the production in New South Wales during the last five years :—

COKE.—PRODUCTION, NEW SOUTH WALES.

Items.	1931.	1932.	1933.	1934.	1935.
Quantity .. tons	217,500	356,495	473,427	688,621	857,875
Value, total .. £	297,318	403,177	512,693	636,346	802,887
Value, per ton	27s. 4d.	22s. 7d.	21s. 8d	18s. 6d.	18s. 9d.

The figures quoted refer to the product of coke ovens, and are exclusive of coke produced in the ordinary way at gas works. Prior to the depression the maximum production of coke was 709,000 tons in 1927; the output fell to 217,509 tons in 1931, but with the general recovery of trade the figure rose to 857,875 tons in 1935.

A small quantity of coke is made in Queensland, the quantity returned in 1935 being 24,877 tons, of which 20,785 tons, was produced at Bowen State Coke Works. The greater proportion of the output of these works was consigned to the Mount Isa Mines Ltd. and to the Chillagoe State Smelters. Hitherto the coke used at these ore treatment works was imported from New South Wales, but now that the battery of 45 ovens is in operation, it is anticipated that the output will be sufficient to meet the requirements of the State. The following table shows the amount manufactured locally during the last five years:—

COKE.—PRODUCTION, QUEENSLAND.

Year.	1931.	1932.	1933.	1934.	1935.
Quantity .. tons	2,280	1,933	15,096	25,655	24,877

In order to avoid duplication with coal values the returns for coke have not been included in the general tables of mineral production in the early part of this chapter.

§ 12. Oil Shale and Mineral Oil.

1. **Oil Shale.**—(i) *General.* Reference to the deposits of oil shale and the search for mineral oil in Australia will be found in Official Year Book No. 22, pages 791 to 793.

(ii) *New South Wales.* The establishment of the oil shale industry in Australia by the development of the deposits at Newnes in New South Wales has received the serious consideration of both the Commonwealth and the New South Wales Governments. The project has been the subject of a number of investigations, and reports in connexion therewith have been issued. In 1937 negotiations were completed between the two Governments and a leading business man of New South Wales, in which the latter undertook to develop the shale oil industry in the Newnes-Capertee district. An agreement is now being concluded in which provision is to be made for the exemption from excise duty on petrol produced up to 10 million gallons per annum for a period of 25 years. Amongst other things to be provided for is the production of fuel oil in cases of national emergency. The successful establishment of this project will probably lead to an expansion of the industry in Australia; it should provide another avenue for employment and serve as a valuable training ground for purposes of research. In 1934, 200 tons of shale were mined for experimental purposes at an estimated value of £100 but no production was recorded in 1935.

(iii) *Tasmania.* About 38,000 gallons of crude oil were produced in 1934 from shale treated in Tasmania, while the total quantity of oil distilled from shale up to the end of 1934 was set down at 357,000 gallons. There was no production during 1935. An amalgamation of interests was effected in 1931, under the name of the Tasmanite Shale Oil Company. The plant operated by this syndicate closed down at the end of January, 1935.

2. **Coal Oil.**—Attention has been directed to the production of oil from coal by a number of processes. A committee consisting of nominees of the Commonwealth and State Governments, excepting Western Australia, and of Imperial Chemical Industries Ltd. was appointed to advise on specific questions submitted to it. In a report submitted in June, 1937, it was stated that the stage had not been reached when Australia could establish plants for the production of oil from coal. The committee recommended, however, that close touch be kept with developments abroad.

3. **Well Oil.**—(i) *Australia.* The Commonwealth Government encourages the search for oil by placing at the disposal of companies and individuals the advice and experience of its technical staff appointed for this purpose. In co-operation with the Air Board useful aerial reconnaissances have already been made in Queensland by the Commonwealth Geological Adviser, the photographs and mosaics produced proving of great value in conjunction with the ground geological surveys. A further aerial reconnaissance was undertaken to cover most of the possible oil producing regions in Australia.

In February, 1936, the Commonwealth Government announced that information of a much more encouraging nature had been received, indicating that structures favourable to well oil production have been located in New South Wales and probably in Victoria, Queensland and Western Australia. In the circumstances it was decided to evolve a plan of operations to test the possibilities of flow oil in the various selected localities with the least possible delay. Further reference is made in § 16 hereinafter to the search for oil.

(ii) *Victoria*. The production of crude petroleum oil in the year 1935 amounted to 4,320 gallons valued at £108. The total production to the end of that year amounted to 87,148 gallons worth £2,178.

(iii) *Queensland*. Great hopes were at one time entertained in regard to the petroliferous area in Queensland, but while gas and light to medium gravity oils have been found at Roma, and gas and oily wax at Longreach, structural conditions for accumulations on a commercial scale have not yet been located in the drilled areas. The search for oil was continued during 1935 by three companies in localities situated nearer to the coast.

(iv) *South Australia*. Under prescribed conditions, the South Australian Government offers a bonus of £5,000 to the person or body corporate which first obtains from a local bore or well 100,000 gallons of crude petroleum containing not less than 90 per cent. of products obtainable by distillation.

(v) *Western Australia*. During 1935, oil geologists examined territories under the direction of the Freney Kimberley Oil Company Ltd. and Oil Search Ltd. Future operations will depend upon the recommendations arising from these investigations.

§ 13. Other Non-metallic Minerals.

A more or less detailed statement regarding the occurrence and production of other non-metallic minerals is given in preceding Official Year Books (*see* No. 22, pages 793 to 796). The tables of quantity and value in § 1 of this Chapter will, however, show the production of the principal items in this class for each State during the year 1935.

§ 14. Gems and Gemstones.

1. *Diamonds*.—It is difficult to secure accurate returns in connexion with the production of precious stones, but the yield of diamonds in 1934 in New South Wales was estimated at 49 carats, valued at £52, obtained at Copeton in the Tingha division, while the total production to the end of 1934 is given at 204,000 carats, valued at £147,000. There was no production recorded in 1935.

2. *Sapphires*.—The production of sapphires in New South Wales during 1929 was returned as 65 ozs., valued at £450, obtained wholly at Sapphire in the Inverell division, but no output has been recorded since. Production during recent years was restricted owing to the unfavourable market.

In Queensland, gems to the value of £1,805 were purchased on the Anakie sapphire fields in 1935. It is probable that many were sold privately or held for better prices. For these reasons the returns are considered to be very incomplete. There were about 120 miners operating on the fields during 1934 but their number decreased to 64 in 1935. Production has declined very considerably since 1920, when the yield was valued at £60,000.

3. *Precious Opals*.—The estimated value of the opal won in New South Wales during the year 1935 was £5,070, obtained on the Lightning Ridge, White Cliffs and Grawin fields. The figures quoted, however, do not represent the total output, as in many instances miners, buyers and collectors leave the fields before a record of their production or purchases can be secured. Some very fine stones are at times obtained, one weighing 5 ozs. and valued at £300 being found in 1911. Three finds of large stone were made in 1928, the gems weighing 790, 590 and 232 carats respectively, and showing fine fire and lustre. Occasionally black opals of very fine quality are found, one specimen from the Wallangulla field, weighing 6½ carats, being sold in 1910 for £102, while in the early part of 1920 a specimen realized £500. It is stated that this locality is the

only place in the world where the "black" variety of the gem has been found. The total value of opal won in New South Wales since the year 1890 is estimated at £1,613,000, but as pointed out above the figures are to some extent understated.

Small quantities of precious opal are found in the Beechworth district in Victoria.

The opaliferous district in Queensland stretches over a considerable area of the western interior of the State, from Kynuna and Opalton as far down as Cunnamulla. The yield in 1935 was estimated at £200, and up to the end of that year at about £187,000. These figures are, however, merely approximations, as large quantities of opal, of which no record is obtained, are disposed of privately. Production during recent years has been limited by the paucity of demand and only 6 persons were engaged during 1935. The greatest recorded output was for the year 1895 when the yield was valued at £32,750.

Owing to the poor market for gems, production from the Coober Pedy opal field situated in the Stuart Range in South Australia fell from £11,056 in 1929 to £1,517 in 1934. In 1935, production recovered somewhat and amounted to £3,228. The field is extremely prolific, a large quantity of precious white opal having been raised therefrom, while only a small portion of the known opal-bearing area has been thoroughly tested. The greatest yield for the State in any one year was obtained in 1920 when the value of production was returned at £24,000.

According to a report a few years ago by the Australian Trade Commissioner in the East there is a good sale for the gems in China. It is stated that there is no difficulty in cutting and polishing, as the Chinese method of dealing with jade, dating back many centuries, can also be applied to opal.

4. **Other Gems.**—Various other gems and precious stones have from time to time been discovered in the different States, the list including agates, amethysts, beryls, chialtolite, emeralds, garnets, olivines, moonstones, rubies, topazes, tourmalines, turquoises and zircons. In Western Australia, 609 carats (rough) of emeralds, valued at £278, were produced during 1929 in the Cue district on the Murchison gold-field. The value of the 3,750 carats reported from the same area in 1930 was not ascertainable, as there were no sales during the year. There has been no recorded production since 1930.

§ 15. Numbers Engaged, Wages Paid and Accidents in Mining.

1. **Total Employment in Mining.**—The number of persons engaged in the mining industry in Australia fluctuates according to the season, the price of industrial metals, the state of the labour markets, and according to the permanence of new finds and the development of the established mines. During the year 1935 the number so employed was as follows:—

NUMBER OF PERSONS ENGAGED IN MINING, 1935.

State.	Number of Persons engaged in Mining for—						Total.
	Gold.	Silver, Lead and Zinc.	Copper.	Tin.	Coal.	Other.	
New South Wales ..	6,652	3,536	7	1,807	13,337	1,316	26,655
Victoria ..	6,960	..	..	5	2,012	87	9,064
Queensland ..	3,931	544	170	1,122	2,455	318	8,540
South Australia ..	243	..	54	..	..	677	974
Western Australia ..	14,708	..	..	58	689	102	15,557
Tasmania ..	216	1,046	1,758	1,452	340	267	5,079
Northern Territory ..	403	..	..	30	..	133	566
Australia ..	33,113	5,126	1,989	4,474	18,833	2,900	66,435

Included in the figures for "other" in South Australia were 412 engaged in mining iron ore, 54 gypsum miners, 125 salt gatherers, and 50 opal miners. The Tasmanian figures include 44 osmiridium miners, and those for the Northern Territory, 80 mica miners.

The following table shows the number of persons engaged in mining in each State at intervals since 1901 and the proportion so employed to the total population:—

NUMBER ENGAGED IN MINING PER 100,000 OF POPULATION.

State.	1901.		1911.		1921.	
	Miners employed.	No. per 100,000 of Popu-lation.	Miners employed.	No. per 100,000 of Popu-lation.	Miners employed.	No. per 100,000 of Popu-lation.
New South Wales ..	36,615	2,685	37,017	2,225	29,701	1,410
Victoria ..	28,670	2,381	15,986	1,210	5,211	339
Queensland ..	13,352	2,664	13,201	2,147	5,847	766
South Australia ..	7,007	1,931	6,000	1,457	2,020	406
Western Australia ..	20,895	11,087	16,596	5,787	7,084	2,122
Tasmania ..	6,923	4,017	5,247	2,760	3,170	1,486
Northern Territory ..	..	..	715	21,595	131	3,356
Australia ..	113,462	2,992	94,762	2,109	53,164	974

State.	1931.		1934.		1935.	
	Miners employed.	No. per 100,000 of Popu-lation.	Miners employed.	No. per 100,000 of Popu-lation.	Miners employed.	No. per 100,000 of Popu-lation.
New South Wales ..	30,682	1,200	26,788	1,021	26,655	1,008
Victoria ..	6,463	359	8,825	482	9,064	492
Queensland ..	6,753	730	8,597	900	8,540	884
South Australia ..	518	90	1,175	201	974	166
Western Australia ..	7,147	1,053	13,307	3,013	15,557	3,493
Tasmania ..	3,397	1,512	4,539	1,981	5,079	2,212
Northern Territory ..	145	2,918	378	7,663	566	11,096
Australia ..	55,105	844	63,009	952	66,435	988

The general falling-off since 1901 is largely due to the causes mentioned in each section hereinbefore. The proportion to population shows increases since 1931 in all States excepting New South Wales, and is attributable mainly to the larger numbers engaged in the search for gold. Since that year the increase in the number so employed was approximately 10,000 persons. The number engaged in mining for tin increased by 2,200, while increases were also recorded in the mining for silver, lead and zinc, 1,700, and copper, 100. These increases were offset to some extent by the decrease in coal-mining from 21,400 in 1931 to 18,800 in 1935, which decline is largely responsible for the lower proportion employed in New South Wales.

2. Wages Paid in Mining.—Information regarding rates of wages paid in the mining industry, which in earlier issues of the Official Year Book was given in this chapter, is now contained in the Labour Report issued by this Bureau.

3. **Accidents in Mining, 1935.**—The following table gives particulars of the number of men killed or injured in mining accidents during the year 1935 :—

MINING ACCIDENTS, 1935.

Mining for—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia
KILLED.								
Coal ..	11	..	..	..	2	..	..	13
Copper ..	..	..	2	..	..	1	..	3
Gold ..	3	5	2	..	28	..	..	38
Silver, lead and zinc ..	6	..	1	..	..	..	..	7
Tin ..	1	..	..	..	..	..	..	1
Other minerals ..	..	..	..	1	..	..	..	1
Total ..	21	5	5	1	30	1	..	63
INJURED.								
Coal ..	61	5	197	..	287	..	..	550
Copper ..	..	..	53	2	..	104	5	164
Gold ..	19	4	23	3	666	1	..	716
Silver, lead and zinc ..	91	..	52	..	..	2	..	145
Tin ..	3	..	5	..	..	29	1	38
Other minerals ..	1	..	..	22	..	3	..	26
Total ..	175	9	330	27	953	139	6	1,639

§ 16. Government Aid to Mining.

1. **Commonwealth.**—(i) *General.* Assistance to mining has been given by the Commonwealth under the provisions of the Precious Metals Prospecting Act 1926, the Gold Bounty Act of 1930, the Petroleum Oil Search Acts 1936, which superseded the Petroleum Prospecting Acts of 1926, 1927 and 1928, the Loan Appropriation (Unemployment Relief) Act 1934 and the Northern Australia Survey Act 1934.

In addition to this financial assistance considerable sums have been spent by the Commonwealth Government in an endeavour to locate new mineral fields. In conjunction with the Empire Marketing Board a sum of £32,000 was made available to provide for geophysical prospecting in Australia. This survey was begun in April, 1928, and completed in February, 1930. A report in connexion therewith was issued.

In 1934 the Northern Australia Survey Act was passed. Under this Act the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of an aerial, geological and geophysical survey of certain areas in Australia north of the 22nd parallel of south latitude at a cost of £150,000. Half of the cost is being borne by the Commonwealth and the other half equally between the two States. The survey, which is expected to extend over a period of three years, is now in full progress. Geological and geophysical parties are in the field, and the aerial photographic survey has covered an area of approximately 6,000 square miles. The latest report was in respect of the period ending 31st December, 1930, and a number of reports on individual areas have been issued as appendices.

(ii) *Metalliferous Mining.* (a) The Precious Metals Prospecting Act 1926 provided a sum of £40,000 of which £15,000 was to be expended in the Northern Territory, and the balance allocated to the States in such proportions as the Minister determined. The total expenditure under this Act amounted to £27,000 but no further assistance is contemplated from this fund.

(b) The Gold Bounty Act 1930 provided that for a period of ten years from 1st January, 1931, a bounty of £1 per ounce would be payable under prescribed conditions by the Commonwealth on each ounce of fine gold produced in excess of the average

production for the three years 1928-30. Under the Financial Emergency Act 1931 the Bounty was reduced to 10s. per ounce, subject to increases of 1s. for each decrease of 3s. per cent. in the average rate of exchange. The rate of exchange on which the reduction to 10s. per ounce was based was taken as 30 per cent. Under the Financial Emergency Act of 1932 the bounty was temporarily suspended.

(c) Grants to States for Assistance to Metalliferous Mining. Under the Loan Appropriation (Unemployment Relief) Act 1934 a sum of £283,750 was made available to the States as grants for assistance to metalliferous mining. The amount granted to each State and the purpose to which it was applied are set out in the table below. In addition to this the sum of £45,000 was allocated to the Northern Territory and £5,000 to Papua, making a total of £333,750. At the 30th June, 1937, the whole of this sum had been distributed.

COMMONWEALTH GRANTS TO STATES FOR ASSISTANCE TO METALLIFEROUS MINING.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Staff and Administration ..	5,000	8,000	3,000	..	1,000	..	17,000
Prospecting ..	5,000	10,000	17,000	..	50,000	2,500	84,500
Plants and Operation thereof ..	10,000	4,000	20,000	6,000	..	7,500	47,500
Advances (a) ..	17,500	20,000	5,000	17,500	..	9,250	69,250
Metallurgical Investigations ..	..	..	5,000	..	..	1,250	6,250
Batteries ..	..	..	..	10,000	5,000	1,250	16,250
Roads and Tracks ..	..	2,000	..	..	..	4,000	6,000
Other ..	5,000	6,000	20,000	..	6,000	..	37,000
Total ..	42,500	50,000	70,000	33,500	62,000	25,750	283,750

(a) This provision is contingent upon the States providing a similar amount.

The funds were administered by a Trust comprising representatives of the State and one representative of the Commonwealth who in each instance is the Sub-Treasury Accountant in the State.

(d) In addition to the amounts shown in (c) above, a sum of £210,000 has been advanced by the Commonwealth Government to the States to aid the metalliferous mining industry during the years ending June, 1937 and 1938. This amount is to be distributed as follows: New South Wales, £33,200; Victoria, £45,700; Queensland, £60,500; South Australia, £12,800; Western Australia, £44,400; and Tasmania, £13,400. £140,000 was made available during 1936-37 and the balance of £70,000 is to be appropriated during 1937-38.

(iii) *Search for Oil.* The Commonwealth Government has encouraged the search for oil in Australia, Papua and New Guinea and considerable sums have been spent during the past ten years in geological surveys and in drilling operations. Details of efforts made during that period are shown in previous issues of the Official Year Book.

In 1936 the Petroleum Oil Search Act was passed which repealed all previous enactments. Under this Act a sum of £250,000 was appropriated for the purpose of assisting drilling operations in Australia and the Territories of Papua and New Guinea. Considerable preliminary geological surveys have already been conducted and attention is now being directed to the testing of approved sites by drilling. A technical committee known as the Commonwealth Oil Advisory Committee was appointed to act in an advisory capacity and to deal with applications for assistance.

The Commonwealth Oil Refineries Ltd. of which the Government of the Commonwealth of Australia is the principal shareholder has undertaken an extensive programme of prospecting for oil. The investigation is under the control of an Australian Advisory Committee of Geologists appointed by the Company, the personnel of which comprises the Commonwealth Geological Adviser, the Government Geologist of South Australia and two other members. Two oil geologists, in company with the

Commonwealth Geological Adviser, carried out an aerial reconnaissance of likely areas during 1935. This reconnaissance was a preliminary to a more detailed examination of areas and a study of all the data which have been collected over a period of years. This detailed investigation is now being carried out by one of the geologists.

(iv) *Appointment of Geological Staff.* In 1927 a small geological staff, including a palaeontologist, was appointed. The Geological Adviser visited the United States and Argentine Republic in 1930 to study oil-field conditions on the spot, and submitted a comprehensive report, which was published as a Parliamentary Paper in 1931. Experimental aerial photographic surveys have been carried out in conjunction with the Royal Australian Air Force to determine whether similar methods were applicable under Australian conditions, and a report on the investigations has been issued.

2. **New South Wales.**—The chief aid given by the Government of New South Wales has been in the assistance to prospectors, but there were no appropriations from the Prospecting Vote for the year 1935-36, all claims being met from Unemployment Relief Funds and the Commonwealth Grant. Aid is granted on a footage basis to sink, drive, etc., on approved sites to which a valid mining title is held. Grants approved during the year amounted to £41,036 but the actual expenditure in respect of work completed amounted to £28,875. Loans are also made to assist in the erection of crushing batteries or reduction plants on which interest at the rate of 4 per cent. is charged. During the year loans totalling £8,817 were approved. No rewards were paid in connexion with the discovery of new mineral fields.

3. **Victoria.**—During the year 1935 expenditure in connexion with mining amounted to £19,892, of which £18,822 consisted of advances to prospectors, while the balance of £1,070 was spent in other forms of assistance.

4. **Queensland.**—State assistance to the mining industry in 1935-36 amounted to £20,982, of which £20,000 was advanced to prospectors, the balance consisting of grants under the Mining Machinery Advances Act £581, and £308 for the provision of transport facilities, etc., to mineral fields. In addition to the above amounts, a sum of £10,321 was spent in connexion with the aerial survey of North Australia.

Mining operations conducted by the State include three coal mines situated at Bowen, Styx and at Mt. Mulligan, three batteries at Kidston, Charters Towers and Bamford, an assay office at Cloncurry, smelting works at Chillagoe, coke works at Bowen, and the State treatment works at Irvinebank. The battery at Charters Towers continued to be leased privately.

5. **South Australia.**—Aid is given to the mining industry under the terms of the Mining Act of 1893, and previous measures. Up to the end of 1935 the total amount of subsidy paid was £70,815, of which £13,795 has been repaid, and £4,549 written off, leaving a debit of £52,471. Portion of this amount is represented by machinery that has fallen into the hands of the Government. Repayments must be provided from profits, but in only two instances have the profits enabled a full return to be made. The State maintains batteries and cyanide works at Mount Torrens, Peterborough, Mongolata and Tarcoola, and assays for public purposes are made at the School of Mines. Advances to prospectors in 1935 amounted to £1,999.

6. **Western Australia.**—Under the Mining Development Act of 1902 assistance was granted in 1935 in accordance with the subjoined statement:—Aid to prospectors, £15,268; subsidies on stone crushed for the public, £187; advances in aid of mining work and equipment of mines with machinery, £1,794. Other assistance granted from the vote on various matters during the year amounted to £27,542. The total amount involved was £44,791.

In 1935 there were 25 State batteries in operation of which four were leased. The amount expended thereon up to the end of 1935 was £91,981 from revenue and £363,101 from loan fund giving a total of £455,082. The working expenditure up to the end of 1935 exceeded the revenue by £118,722. The total value of gold and tin produced to the end of 1935 at the State plants was £7,771,087. Free assays and determinations of mineral values for prospectors are made at the Kalgoorlie School of Mines and at the Government laboratory at Perth.

7. **Tasmania.**—Aid to Mining in 1935 amounted to £2,693, of which £2,118 was expended under the Aid to Mining Act 1927 on drilling and assistance and sustenance to prospectors, and the balance of £575 was paid from The Unemployment Relief Act. The amount received from ore sales was £438, the bulk of which was paid to tributers. Receipts amounted to £161.

Tributers' assays are made at a nominal charge, and all tribute surveys are carried out free of charge by the Assay and Survey Office at Zeehan.

8. **Northern Territory.**—During the year 1934-35 the assistance granted to prospectors amounted to £110. In addition a sum of £8,961 was also granted to assist gold mining companies.

The Government maintains batteries at Marranboy, Pine Creek and Tennant Creek. Government Assayers situated at Darwin and Alice Springs make free assays for prospectors, and arrange for the sampling, storage and sale of ores.

§ 17. Metallic Contents of Ores, etc., Produced and Exported.

1. **Local Production.**—According to returns compiled from various sources by the Australian Mines and Metals Association, the quantities of the principal metals (exclusive of gold) extracted in Australia during the five years 1931 to 1935 were as follows:—

REFINED METALS PRODUCED IN AUSTRALIA.

Metal.		1931.	1932.	1933.	1934.	1935.
Silver ..	ozs.	7,349,794	6,499,405	7,957,148	8,674,549	8,983,950
Lead, pig ..	tons	133,306	134,499	159,393	160,201	181,211
Zinc ..	"	53,832	53,200	53,956	54,629	67,666
Copper ..	"	12,936	13,307	11,238	7,970	11,768
Tin ..	"	1,690	1,958	2,360	2,330	2,837

The local production of pig iron during the quinquennium 1923-27 ranged between 330,000 tons in 1923 and 517,000 tons in 1927. Complete information for later years is not available from the returns published by the Association, but according to the metal extraction returns published in the Statistical Register of New South Wales, the production of pig iron in that State amounted in 1931-32 to 190,132 tons, in 1932-33, 336,246 tons, in 1933-34 to 487,259 tons, and in 1934-35 to 698,493 tons. As pointed out previously, the iron ore used is now obtained from South Australia.

2. **Metallic Contents of Ores, Concentrates, etc., Exported.**—The estimated metallic contents of ores, concentrates, etc., exported during the five years 1931 to 1935, as supplied by the Australian Mines and Metals Association, are given in the following table:—

METALLIC CONTENTS OF ORES, CONCENTRATES, ETC., EXPORTED.

Metal.		Contained in—	1931.	1932.	1933.	1934.	1935.
Silver	ozs.	Lead-Silver-Gold Bullion	1,018,359	2,470,807	2,177,633	1,819,546	2,506,018
		Lead Concentrates and Ores	303,307	..	447,943	612,014	270,154
		Zinc Concentrates and Ores	183,111	23,366	319,870	147,522	217,266
		Copper and Gold Ores ..	..	..	..	..	..
		Total	1,504,777	2,494,173	2,945,446	2,579,082	2,998,435
Lead	tons	Lead-Silver-Gold Bullion	17,130	51,857	48,871	35,804	30,723
		Lead Concentrates and Ores	10,982	..	10,019	21,075	9,610
		Zinc Concentrates and Ores	1,878	1,159	2,196	803	1,688
		Total	29,990	53,016	61,086	57,682	48,000
Zinc	tons	Lead Concentrates and Ores	557	..	586	..	..
		Zinc Concentrates and Ores	41,917	31,542	60,142	26,963	54,693
		Total	42,474	31,542	60,728	26,963	54,693
Copper	tons	Ores, Matte, etc.	2,765	1,099	1,109	1,122	1,361
Tin	tons	Concentrates and Ores ..	17	101	139	198	289

§ 18. Oversea Exports of Ores, Metals, etc.

The following table shows the quantity and value of the principal oversea exports of ores, concentrates and metals, the produce of Australia, together with the countries to which the respective products were forwarded, for the year 1935-36 :—

OVERSEA EXPORTS OF AUSTRALIAN ORES, METALS, ETC., 1935-36.

Article.	Total Exports.	Exports to—						
		United Kingdom.	U.S. America.	Belgium.	Germany.	Japan.	New Zealand.	Other Countries.
QUANTITY.								
Ores—	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Copper	6,952	999	..	..	..	..	..	5,953
Silver and Silver-lead	42,816	..	400	40,168	2,248	..	..	..
Iron	8,646,843	..	2,116,540	380,220	..	5,839,220	163	310,700
Wolfram	7,566	469	1,709	2,449	1,585	..	..	1,354
Tin	3,105	889	..	..	..	..	(b)	2,216
Zinc .. ..	..	..	..	..	..	..	..	..
Other	50,507	7,092	36,416	200	337	102	4,458	1,902
Concentrates—								
Silver and Silver-lead	301,779	..	..	301,779	..	..	..	..
Zinc	3,862,579	3,457,592	..	144,042	122,641	..	..	(c) 138,304
Copper	196,948	300	174,431	18,542	3,455	..	..	220
Tin	6,353	1,003	..	5,350	..	..	..	..
Lead Slime Residue .. ..	..	..	..	..	..	..	..	..
Gold Ore, Quartz and Concentrates	16,351	679	5,182	10,490	..	..	..	..
Other	855	593	..	..	..	..	..	262
Cadmium—Blocks, Ingots, &c.	4,333	3,940	..	..	..	30	3	360
Copper—								
Matte	20,004	..	..	20,004	..	..	..	..
Ingot	288	..	..	..	..	..	288	..
Tin—Ingot	16,012	11,198	1,100	..	..	..	3,475	239
Lead—								
Pig	3,856,214	3,780,948	..	..	..	33,431	31,822	10,013
Matte	26,531	20,000	6,531	..	..	..	..	..
Zinc—Bars, Blocks, etc.	846,264	348,175	..	..	..	226,462	1,909	(d) 269,718
Platinum, Osmium, etc.	oz. (a) 317	oz. 317	oz. ..	oz. ..	oz. ..	oz. ..	oz. ..	oz. ..
Gold—								
Bar, Dust, etc.	1,062,448	844,657	202,804	..	..	..	..	(c) 14,987
Silver—								
Bar, Ingot, etc.	6,472,759	1,937,227	87	..	..	..	622	(e) 443,823
VALUE.								
Ores—	£	£	£	£	£	£	£	£
Copper	1,048	441	..	..	..	..	..	607
Silver and Silver-lead	17,091	..	137	16,734	220	..	..	..
Iron	231,810	..	55,662	9,007	..	158,064	18	8,159
Wolfram	47,742	2,813	12,525	15,488	9,540	..	..	7,376
Tin	26,502	6,203	..	..	..	..	..	(b) 20,299
Zinc .. ..	..	..	..	..	..	..	..	..
Other	27,711	8,091	11,174	57	1,992	4,444	1,564	389
Concentrates—								
Silver and Silver-lead	204,204	..	..	204,204	..	..	..	..
Zinc	534,244	468,290	..	38,787	14,221	..	..	(c) 12,446
Copper	337,501	440	321,025	11,146	4,495	..	..	395
Tin	51,028	8,501	..	42,437	..	..	..	..
Lead Slime Residue .. ..	..	..	..	..	..	..	..	..
Gold Ore, Quartz and Concentrates	9,727	571	3,838	5,318	..	..	..	..
Other	3,190	1,302	..	..	..	..	..	1,888
Cadmium—Blocks, Ingots, etc.	81,139	74,249	..	..	..	364	62	6,164
Copper—								
Matte	24,674	..	..	24,674	..	..	..	..
Ingot	743	..	..	..	..	..	743	..
Tin—Ingot	200,807	137,743	11,811	..	..	..	48,335	2,918
Lead—								
Pig	3,811,689	3,734,035	..	..	..	31,859	34,960	10,895
Matte	25,692	15,992	9,700	..	..	..	..	..
Zinc—Bars, Blocks, etc.	905,125	372,413	..	..	..	241,727	2,026	(d) 288,956
Platinum, Osmium, etc.	3,098	3,098	..	..	..	..	..	..
Gold—								
Bar, Dust, etc.	9,225,136	7,335,802	1,758,808	..	..	..	..	(c) 140,526
Silver—								
Bar, Ingot, etc.	863,671	224,863	12	..	..	..	104	(e) 638,692
Total	16,633,572	12,394,937	2,184,692	368,752	30,968	436,458	87,755	1,130,010

(a) Mainly osmium exported from Tasmania and platinum from New South Wales. (b) Malaya (British). (c) France. (d) India, 267,317 cwt., £286,305; Egypt, 2,401 cwt., £2,651. (e) Ceylon, 4,158,988 fine ozs., £598,095; India, 275,479 fine ozs., £40,561.

CHAPTER XIX.

PASTORAL PRODUCTION.

§ 1. Initiation and Growth of Pastoral Industry.

1. **Early Statistics.**—The live stock which Captain Phillip brought with him when establishing the first settlement in Australia, in January, 1788, is stated to have comprised seven horses, six cattle, twenty-nine sheep, twelve pigs and a few goats. Later in the same year, in a letter from Captain Phillip to Lord Sydney, then Secretary of State for the Colonies, an enclosure sets forth the numbers of each kind of live stock in the colony on 1st May, 1788. These details together with those of later enumerations are shown in the following table :—

LIVE STOCK.—AUSTRALIA.

Date.	Horses.	Cattle.	Sheep.	Pigs.	Goats.
1st May, 1788	7	7	29	74	19
10th November, 1791 ..	4	18	57	37	(c)
1st July, 1794	(a) 20	40	576	(c)	522
15th June, 1795	(b) 49	176	832	(c)	985
1st September, 1796 ..	57	227	1,531	1,869	1,427
15th August, 1800 ..	203	1,044	6,124	4,026	2,182

(a) Not including three asses.

(b) Not including seven asses.

(c) Not stated.

The return for the year 1788 includes, in addition to poultry, five rabbits.

2. **Subsequent Statistics.**—The statistical returns of live stock in Australia subsequent to the year 1800 referred mainly to those in possession of the Government, omitting those owned by individuals. Doubtless the growth of population, the expansion of the area settled and the increase of private ownership made it difficult in those early times to secure accurate returns. The figures continued to be somewhat defective up to 1860, but from that year onwards fairly complete information is available for most of the States. At the present time, statistics of live stock are collected annually in all the States principally through the agency of the police, but in the years 1885 to 1888 inclusive, and 1893 to 1895 inclusive, these particulars were not collected in South Australia, and similar gaps occur in the Victorian records for the periods 1895 to 1899 inclusive and 1901 to 1903. In order to obtain totals for Australia for these years the missing numbers have been supplied by interpolation. The results so obtained probably differ but slightly from the actual numbers for the respective years.

3. **Increase in Live Stock.**—Particulars concerning the numbers of each of the principal kinds of live stock in Australia at decennial intervals from 1860 to 1930, and from 1931 onwards in single years, are given in the following table, and are shown continuously in the graph on page 651.

During the seventy-five years covered by the table the live stock of Australia increased considerably, horses 308 per cent. ; cattle 251 per cent. ; sheep 441 per cent. ; and pigs 269 per cent. The average annual increases which these aggregates represent are as follows :—Horses, 1.90 per cent. ; cattle, 1.69 per cent. ; sheep, 2.28 per cent. ; and pigs, 1.75 per cent.

LIVE STOCK.—AUSTRALIA.

31st December.				Horses.	Cattle.	Sheep.	Pigs.
1860	..	..	..	431,525	3,957,915	20,135,286	351,096
1870	..	..	..	716,772	4,276,326	41,593,612	543,388
1880	..	..	..	1,068,774	7,527,142	62,184,252	815,776
1890	..	..	..	1,521,598	10,299,816	97,881,221	891,138
1900	..	..	..	1,609,654	8,640,225	70,602,995	950,349
1910	..	..	..	2,165,866	11,744,714	98,066,046	1,025,850
1920	..	..	..	2,415,510	13,499,737	81,795,727	764,406
1930	..	..	..	1,792,734	11,720,916	110,568,279	1,071,679
1931	..	..	..	1,775,550	12,260,955	110,618,893	1,167,845
1932	..	..	..	1,765,437	12,783,137	112,926,931	1,162,407
1933	..	..	..	1,763,225	13,512,486	109,921,053	1,046,867
1934	..	..	..	1,767,758	14,048,671	113,048,037	1,158,274
1935	..	..	..	1,764,430	13,911,659	108,875,801	1,293,964

4. **Fluctuations.**—The increases referred to, however, have not been continuous, marked fluctuations having taken place during the period, mainly on account of the droughts which have from time to time left their impress on the pastoral history of Australia. These were in evidence in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26 and 1927-28.

The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1918, 2,527,149; cattle, 1921, 14,441,309; sheep, 1934, 113,048,037; and pigs, 1935, 1,293,964.

5. **Live Stock in Relation to Population.**—The number of each kind of live stock per head of the population of Australia has varied during the past seventy-five years in the manner shown in the succeeding table:—

LIVE STOCK PER HEAD OF POPULATION.—AUSTRALIA.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.		
1860	..	0.38	3.45	17.58	0.31	1920	..	0.44	2.49	15.11	0.14
1870	..	0.43	2.60	25.24	0.33	1930	..	0.28	1.81	17.07	0.17
1880	..	0.48	3.37	27.87	0.37	1932	..	0.27	1.95	17.23	0.18
1890	..	0.48	3.17	31.06	0.28	1933	..	0.26	2.03	16.52	0.16
1900	..	0.43	2.29	18.75	0.25	1934	..	0.27	2.11	16.97	0.17
1910	..	0.49	2.65	22.16	0.23	1935	..	0.26	2.06	16.13	0.19

6. **Live Stock in Relation to Area.**—The numbers of live stock per square mile in the several States and Territories of Australia are given in the following table:—

LIVE STOCK PER SQUARE MILE, 1935.

State or Territory.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales	1.75	10.95	167.85	1.41
Victoria	4.05	23.80	198.64	3.58
Queensland	0.66	9.00	26.94	0.45
South Australia	0.52	0.88	20.91	0.25
Western Australia	0.16	0.90	11.36	0.10
Tasmania	1.16	10.30	81.63	1.72
Northern Territory	0.07	1.72	0.05	0.00
Federal Capital Territory	1.13	10.84	242.89	0.67
Total	0.59	4.08	36.60	0.43

7. **Minor Classes of Live Stock.**—Excluding Victoria, where the details are not available, the numbers of minor classes of live stock returned for 1935 were as follows:—Goats, 143,870; camels, 4,179; mules and donkeys, 13,399; and ostriches, 32. Of these, goats were most numerous in Queensland, camels, mules and donkeys in Western Australia, and ostriches in South Australia. In the raising of goats, some attention has been devoted to the angora goat and its product (mohair), and 6,441 angora goats are included in the total of 143,870 goats shown above. Of these, 1,830 were in New South Wales, 1,179 in Queensland, 2,415 in South Australia, 663 in Western Australia, 353 in Tasmania and 1 in the Federal Capital Territory, while the quantity of mohair produced in Queensland in 1935 was set down at 192 lb., and the number of skins placed on the market was returned as 88.

8. **Net Exports of Principal Pastoral Products.**—The quantities by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1931–32 to 1935–36 were as follows:—

NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA.

Product.	Unit of Quantity.	1931–32.	1932–33.	1933–34.	1934–35.	1935–36.
QUANTITIES.						
Animals (living)—						
Cattle	No.	331	189	115	63	76
Horses	"	4,771	3,227	3,249	4,123	3,783
Sheep	"	47,131	51,821	42,914	58,182	64,340
Bones	cwt.	9,416	8,299	8,737	10,207	17,188
Glue-pieces and Sinews	"	186	495	225	1,251	379
Glycerine	lb.	13,575	93,126	—288,222	—9,282	—1,193,982
Hair	"	74,445	—121,363	—119,775	—559,673	—902,875
Hoofs	cwt.	(a)	(a)	(a)	(a)	(a)
Horns	"	(a)	(a)	(a)	(a)	(a)
Meats—						
Frozen Beef (b)	lb.	165,871,501	153,972,403	173,076,002	212,099,109	196,818,221
" Mutton and Lamb	"	165,281,142	166,797,195	171,108,849	190,192,823	178,005,079
" Rabbits and Hares	pair	(a)	(a)	(a)	(a)	(a)
" Other	lb.	8,061,876	9,579,958	12,214,574	15,012,140	15,008,200
Potted, and Extract of	"	(a)	(a)	(a)	(a)	(a)
Preserved in Tins, etc.	lb.	5,258,749	7,212,976	4,620,270	5,941,584	6,418,202
Other (excluding Bacon and Ham)	"	277,562	330,186	466,613	408,396	561,341
Sausage Casings	cwt.	11,562	10,429	19,361	14,543	8,938
Skins—						
Hides	No.	(a)	(a)	(a)	(a)	(a)
Sheep	"	(a)	(a)	(a)	(a)	(a)
Rabbit and Hare	cwt.	69,774	77,873	99,339	84,744	91,113
Other (including Undressed Furs)	"	(a)	(a)	(a)	(a)	(a)
Fallow	cwt.	768,511	745,422	471,591	822,751	445,358
Wool—						
Greasy	lb.	772,804,985	848,468,549	728,676,211	782,278,901	742,738,515
Scoured	"	55,708,642	73,248,756	72,679,344	60,408,783	68,053,803
Tops	"	2,179,330	2,525,380	2,923,974	3,104,232	3,144,411
Noils	"	952,413	1,208,204	1,917,741	1,303,616	1,647,629
Waste	"	366,484	738,201	837,184	1,067,598	880,045

NOTE.—The minus sign (—) signifies net imports.
chilled beef from 1932–33.

(a) Quantity not available.

(b) Including

The values of the net exports for the same five years are furnished in the next table, and amount to no less a total than £268,592,671 for the period, or an average of £53,718,534 per annum, of which wool represents 80.47 per cent. Meat, skins and tallow rank next in order of importance.

NET EXPORTS OF PASTORAL PRODUCTS.—AUSTRALIA.

Product.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
VALUES. (a)					
	£	£	£	£	£
Animals (living)—					
Cattle	—5,673	—7,089	—27,300	—26,491	—30,244
Horses	100,935	78,054	35,646	—15,631	3,473
Sheep	8,496	12,654	14,440	30,118	36,061
Bones	6,725	5,199	6,058	7,406	9,911
Glue-pieces and Sinews	1,610	2,489	1,128	2,908	4,812
Glycerine	4,691	7,421	1,172	4,062	—31,937
Hair	—24,966	—53,063	—58,098	—81,902	—115,077
Hoofs	4,750	4,330	5,755	6,092	5,935
Horns	14,815	12,771	14,301	18,083	16,721
Meats—					
Frozen Beef	2,087,812	(b) 1,854,569	(b) 2,020,049	(b) 2,559,605	(b) 2,481,803
" Mutton and Lamb	2,994,056	2,697,213	3,575,827	4,475,665	4,465,691
" Rabbits and Hares	478,946	552,377	425,665	413,181	218
" Other	151,793	170,462	216,428	266,167	286,415
Potted, and Extract of	5,174	—7,584	—29,452	—29,507	—32,925
Preserved in Tins, etc.	135,505	183,539	130,996	152,880	191,310
Other (excluding Bacon and Ham)	6,098	7,710	10,881	7,649	9,885
Sausage Casings	56,701	44,002	184,373	106,210	9,206
Skins—					
Hides	62,762	52,995	119,344	147,782	450,577
Sheep	1,097,816	1,368,986	2,624,990	1,753,908	2,808,267
Rabbit and Hare	477,476	450,862	949,819	867,068	1,732,715
Other (including Undressed Furs)	304,996	—13,379	99,772	—37,912	—11,111
Tallow	827,454	788,395	476,309	922,505	653,353
Wool—					
Greasy	28,883,940	32,063,303	49,463,224	34,095,191	45,806,287
Scoured	2,817,703	3,952,313	6,646,248	4,598,459	5,518,336
Tops	248,055	271,993	434,472	331,833	404,644
Noils	44,520	53,902	121,445	75,950	123,481
Waste	7,940	20,030	32,220	39,935	48,846
Total Values	40,800,130	44,551,444	67,495,712	50,727,387	65,017,998

NOTE.—The minus sign (—) signifies net imports.
(b) Including chilled beef.

(a) Australian currency values.

9. Value of Pastoral Production.—Particulars of the gross, local and net value of pastoral production for each State are shown in the following table for the year 1935-36 together with the totals for the two preceding years. Fuller details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXVIII.—Miscellaneous. It should be noted, however, that maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net value of production is inflated to the extent of these costs.

GROSS, LOCAL AND NET VALUE OF PASTORAL PRODUCTION, 1935-36.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Fodder fed to Farm Stock.	Value of other materials used in process of Production.	
	£	£	£	£	£	£
New South Wales ..	37,113,000	3,472,000	33,641,000	603,000	239,000	32,799,000
Victoria ..	12,184,114	1,459,829	10,724,285	282,000	341,235	10,101,050
Queensland ..	13,287,000	1,226,000	12,061,000	300,000	200,000	11,561,000
South Australia ..	5,442,737	651,414	4,791,323	88,171	100,496	4,602,656
Western Australia ..	6,199,581	591,850	5,607,731	180,462	77,053	5,350,216
Tasmania ..	1,697,620	125,890	1,571,730	54,000	25,270	1,492,460
Total 1935-36	83,224,102	7,506,983	75,717,119	1,505,633	983,754	73,227,732
1934-35	64,647,128	6,986,693	57,660,435	1,314,510	587,420	55,758,499
1933-34	84,302,489	7,684,309	76,618,180	1,265,686	545,903	74,806,591

(a) No deduction has been made for depreciation and maintenance.

Although depreciation has not been deducted in arriving at the net value of production this item was compiled in each State for 1935-36 and amounted in the aggregate to £475,600.

10. **Consumption of Meats.**—Particulars of the per capita consumption of meat in Australia are shown in the following table, together with details for certain other countries. The figures have in each case been obtained from official sources, although it is not definitely known that they are all on a similar basis.

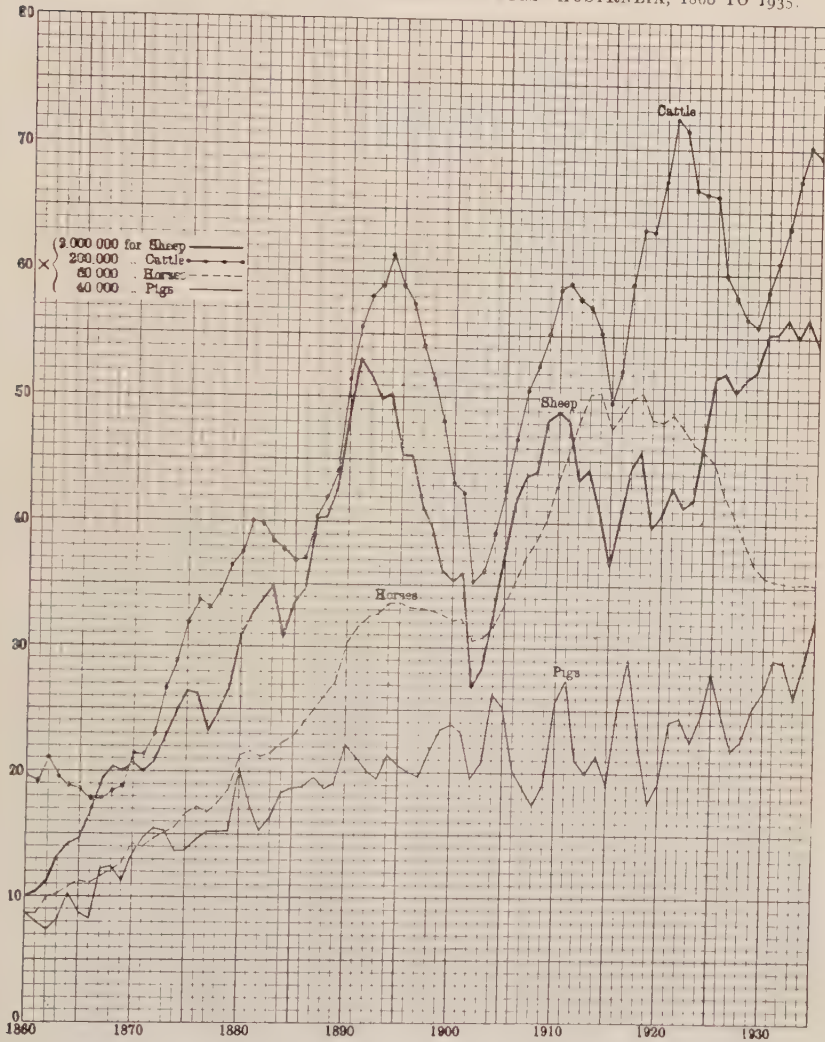
The average consumption in Australia is somewhat below that of New Zealand, but it is greatly in excess of that of Canada, Great Britain and the United States in which countries the average annual consumption approximates 135 lb. per head of population. Compared with Australia the consumption of beef, mutton and lamb in these countries is relatively small, but pork consumption is greatly in excess of the average recorded both for Australia and New Zealand.

The world's supply of beef, mutton and lamb is obtained chiefly from countries situated in the Southern Hemisphere of which Argentine Republic, Australia, New Zealand and Uruguay are the main contributors. Argentine Republic furnishes the largest export of beef and New Zealand that of mutton and lamb, while Australia occupies second place in both commodities. Supplies of pork and pork products are largely drawn from countries in the Northern Hemisphere. It is to be expected, therefore, that the per capita consumption of beef, mutton and lamb will be greatest in the Southern producing countries, and pig meat in the northern.

MEATS.—PER CAPITA CONSUMPTION. AUSTRALIA AND OTHER COUNTRIES.

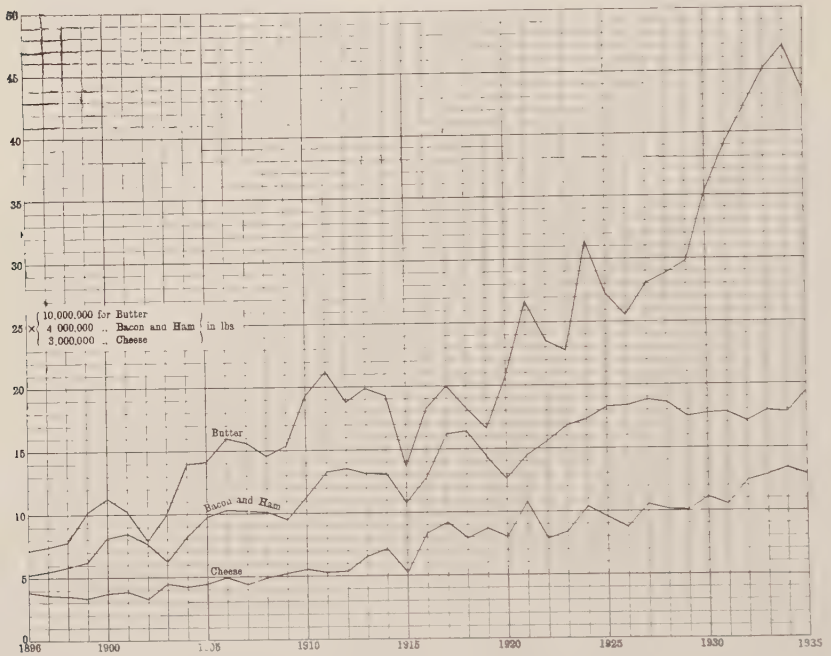
Description.	Australia, 1935-36.	New Zealand.	Great Britain, 1934.	Canada, 1936.	United States of America, 1934.
	lb.	lb.	lb.	lb.	lb.
Beef and Veal ..	132.79	125.00	65.00	60.34	63.00
Mutton and Lamb ..	73.35	105.00	30.00	5.93	7.00
Pork and Bacon and Ham ..	20.20	17.00	43.00	67.83	68.00
Total All Meats ..	226.34	247.00	138.00	134.10	138.00

NUMBER OF HORSES, CATTLE, SHEEP AND PIGS—AUSTRALIA, 1860 TO 1935.



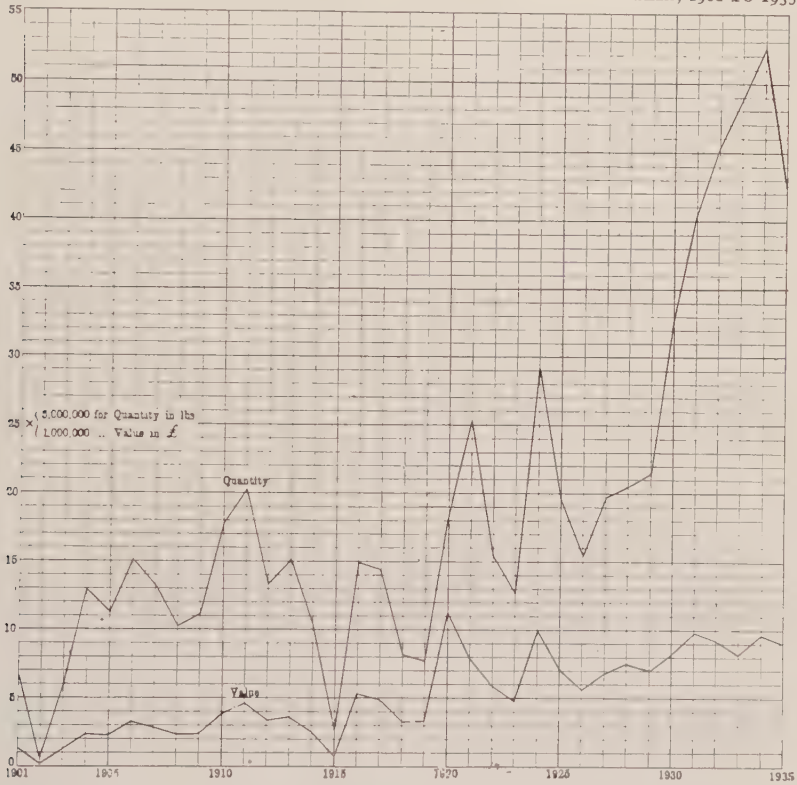
EXPLANATION.—The base of each small square represents an interval of one year, and the vertical side 2,000,000 in the case of sheep, 200,000 for cattle, 50,000 for horses, and 40,000 for pigs.

PRODUCTION OF BUTTER, CHEESE, AND BACON AND HAM—AUSTRALIA, 1896 TO 1935-36.



EXPLANATION.—The base of each small rectangle represents an interval of one year, and the vertical height of each denotes in the case of butter 10,000,000 lb., in the case of bacon and ham 4,000,000 lb., and in the case of cheese 3,000,000 lb.

QUANTITY AND VALUE OF NET EXPORTS OF BUTTER FROM AUSTRALIA, 1901 TO 1935-36.



EXPLANATION.—The base of each small rectangle represents an interval of one year, and the vertical height 5,000,000 lb. in weight, or £1,000,000 in value.

§ 2. Horses.

1. Suitability of Australia for Horse-breeding.—From the earliest times the suitability of the climate and pastures of Australia for the production of serviceable breeds of horses has been fully recognized. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages have been utilized to the fullest extent in breeding all classes of horses. As a consequence of this combination of advantages, the Australian horse, whether of the heavy draught, medium weight, or light saddle and carriage variety, compares more than favourably with the product of other lands. The Australian horse is highly regarded by the military authorities in India and considerable numbers are purchased each year for remount purposes, although the demand is not so great as in former years.

2. Distribution throughout Australia.—The States of New South Wales, Queensland and Victoria together depasture more than 76 per cent. of the total number of horses in Australia. In the following table figures are given for each State and Territory during each of the last five years :—

HORSES.—NUMBER.

31st Dec.	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	F.C.T. (a)	Total.
1931	524,751	375,459	468,603	185,222	156,489	30,659	33,442	925	1,775,550
1932	528,943	372,907	451,644	190,222	157,443	30,269	33,072	937	1,765,437
1933	532,028	361,005	448,918	196,780	159,640	30,299	33,500	950	1,763,225
1934	534,853	357,877	447,204	198,705	161,036	30,602	35,094	1,007	1,767,758
1935	542,862	356,106	441,075	197,368	160,181	30,626	35,152	1,060	1,764,430

(a) 31st March year following.

The number of horses attained its maximum in Australia during 1918, when a total of 2,527,149 was recorded; in the same year the United States of America made its highest recording, and Canada reported likewise in 1921. The number in Australia has declined considerably since 1918 as the result of the development in motor transportation and the increasing use of petrol-driven cultivating and other machinery on farms.

During the past five years, however, the returns have been practically stationary probably due to the halt in the use of power-driven machinery on farms owing to depressed prices.

The number of horses in Australia from 1860 onwards may be ascertained from the graph on page 651.

3. Proportions in the Several States and Territories.—The percentages of the number of horses in the several States and Territories on the total for Australia for the year 1935 were:—New South Wales, 30.77; Victoria, 20.18; Queensland, 25.00; South Australia, 11.18; Western Australia, 9.08; Tasmania, 1.71; Northern Territory, 1.99; and Federal Capital Territory, 0.06 per cent.

The percentages in the various States have remained practically constant during the last quinquennium.

4. *Relation to Population.*—In proportion to population, horses are much more numerous in the Northern Territory than in any other of the principal divisions of Australia. Queensland is next in order, while the Federal Capital Territory has the smallest number of horses per head. The number per head of population has declined in all the statistical divisions since 1927. For the year 1935 the relative numbers were:—New South Wales, 0.20; Victoria, 0.19; Queensland, 0.45; South Australia, 0.31; Western Australia, 0.39; Tasmania, 0.13; Northern Territory, 6.81; Federal Capital Territory, 0.11; and Australia, 0.26.

5. *Comparison with other Countries.*—The numbers of horses in the leading horse-breeding countries of the world are as follows:—

HORSES.—NUMBERS IN PRINCIPAL COUNTRIES.

Country.	Year.	Number of Horses (,000 omitted).	Country.	Year.	Number of Horses (,000 omitted).
Soviet Union ..	1936	16,600	Uruguay ..	1930	623
U.S. of America ..	1936	11,527	Sweden ..	1935	611
Argentine Republic	1930	9,858	Turkey ..	1935	601
Brazil ..	1935	6,132	Cuba ..	1934	569
China ..	1935	4,080	Spain ..	1933	508
Poland ..	1936	3,822	Lithuania ..	1936	558
Germany ..	1936	3,407	Denmark ..	1936	536
Canada ..	1936	2,919	Bulgaria ..	1926	482
France ..	1936	2,774	Chile ..	1930	441
India (British and Native) ..	1935	2,394	Peru ..	1929	432
Rumania ..	1935	2,167	Irish Free State	1936	424
Mexico ..	1930	1,888	Haiti ..	1935	400
Manchuria ..	1935	1,838	Bolivia ..	1931	390
Australia ..	1935	1,764	Latvia ..	1936	389
Japan ..	1934	1,464	Finland ..	1935	361
Yugoslavia ..	1935	1,201	Greece ..	1935	361
United Kingdom ..	1935	1,120	Siam ..	1936	360
Colombia ..	1934	972	Netherlands ..	1936	295
Union of South Africa	1930	868	New Zealand ..	1936	276
Italy ..	1936	816	Austria ..	1934	261
Hungary ..	1935	807	Belgium ..	1935	231
Czechoslovakia ..	1935	695	French Morocco	1936	216
Dutch East Indies	1935	642	Estonia ..	1936	216
			Paraguay ..	1926	210

6. *Oversea Trade in Horses.*—(i) *Exports.* Australia's export trade in horses has fluctuated considerably since the war, and is now far below that of earlier years. For instance, during the period 1901–5 the average number exported was over 18,000, whereas during the last five years the figure was 4,100. The total number of horses exported during the latter period amounted to 20,561, valued at £598,672, equal to an annual average of 4,112 for £119,734. The average export price was £29 2s. 4d. The horses exported to India, where they are largely used for army remounts, numbered 3,584 or 87 per cent. of the average exports for the quinquennium.

(ii) *Imports.* The number of horses imported into Australia is comparatively small, consisting mainly of valuable stud animals from the United Kingdom and race horses from New Zealand. The average value per head of the horses imported during the last

five years was £281. The average number imported per annum was, however, only 282, and the average annual value, £79,239. The following table gives the imports, exports and net exports of horses during each of the years from 1931-32 to 1935-36 :—

HORSES.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1931-32 (a) ..	121	20,367	4,892	121,302	4,771	100,935
1932-33 (a) ..	180	30,853	3,407	108,907	3,227	78,054
1933-34 (a) ..	367	61,627	3,616	97,273	3,249	35,646
1934-35 (a) ..	388	150,703	4,511	135,072	4,123	-15,631
1935-36 (a) ..	352	132,645	4,135	130,118	3,783	3,473

(a) Australian currency values.
NOTE.—The minus sign (—) signifies net imports.

§ 3. Cattle.

1. **Purposes for which Raised.**—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in Victoria, New South Wales and Southern Queensland in particular, the portion of Australia in the temperate zone being the best adapted to this industry. On the other hand, beef-producing cattle are mainly raised in the tropical districts, i.e., in the northern parts of Queensland, in the Northern Territory, and in the Kimberley district in the north of Western Australia.

2. **Distribution throughout Australia.**—Until 1880, New South Wales occupied the leading position as a cattle-raising State, but in that year Queensland took first place, which it has since maintained. The graph on page 651 shows a rapid increase in the number of cattle in Australia up to the year 1894, when 12,311,617 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,062,742 in 1902. Following the disastrous drought which terminated in the latter year the herds were gradually built up, and, despite recurring droughts, they continued to increase until the maximum number of 14,441,309 cattle was attained in 1921. After that year the number again fluctuated dropping almost continuously to 1929 with the decline in the overseas demand for frozen beef and occasional droughts particularly in Queensland, and recovering again during the next five seasons with the expansion of dairying a contributing factor.

The numbers of cattle, beef and dairy, in the several States and Territories during each of the last five years are as follows :—

CATTLE.—NUMBER.

31st Dec.	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter. (a)	Total.
1931	2,993,586	1,637,530	5,550,399	265,324	826,532	232,444	749,745	5,395	12,260,955
1932	3,141,174	1,900,922	5,535,065	312,932	857,473	250,807	780,121	4,043	12,783,137
1933	3,361,771	2,002,235	5,781,170	352,728	885,669	262,256	859,867	6,790	13,512,100
934	3,482,831	2,085,080	6,052,641	346,479	911,940	261,588	899,679	8,433	14,048,071
1935	3,388,538	2,091,246	6,033,004	335,354	882,761	270,935	900,535	10,186	13,911,659

(a) 31st March, year following.

Although the proportion is not as high as it has been in the past, Queensland was carrying 43.4 per cent. of the cattle in Australia in 1935.

The largest relative gain since 1930 occurred in the Federal Capital Territory followed by Victoria, South Australia and the Northern Territory; increases were also recorded in the remaining States. The proportion in each of the States and Territories during 1935 was:—New South Wales, 24.35; Victoria, 15.93; Queensland, 43.37; South Australia, 2.41; Western Australia, 6.35; Tasmania, 1.94; Northern Territory, 6.47; Federal Capital Territory, 0.07.

3. Comparison with other Countries.—The following table shows the number of cattle in Australia, and in some of the principal cattle-raising countries of the world, at the latest available date:—

CATTLE.—NUMBERS IN VARIOUS COUNTRIES.

Country.	Year.	Number of Cattle (,000 omitted).	Country.	Year.	Number of Cattle (,000 omitted).
India (British and Native) ..	1935	164,547	Dutch East Indies..	1935	4,516
U.S. of America ..	1936	66,676	Cuba ..	1934	4,515
Soviet Union ..	1936	56,500	French Equatorial and West Africa	1935	4,491
Brazil ..	1935	40,864	Rumania..	1935	4,327
Argentine Republic	1934	30,868	Czechoslovakia ..	1935	4,283
China ..	1935	22,647	New Zealand ..	1936	4,254
Germany..	1936	20,005	Irish Free State ..	1936	4,014
France ..	1936	15,762	Yugoslavia ..	1935	3,982
Australia..	1936	13,500	Spain ..	1933	3,570
Union of South Africa	1935	10,575	Denmark ..	1936	3,116
Poland ..	1936	10,194	Rhodesia..	1935	3,066
Mexico ..	1930	10,083	Paraguay ..	1926	2,973
Canada ..	1936	8,820	Sweden ..	1935	2,919
United Kingdom ..	1936	8,617	Sudan (Anglo-Egyptain)	1936	2,700
Colombia ..	1935	8,337	Nigeria ..	1934	2,688
Uruguay ..	1932	7,372	Netherlands ..	1936	2,570
Italy ..	1936	7,235	Chile ..	1930	2,388
Madagascar ..	1935	5,559	Austria ..	1934	2,349
Siam ..	1936	5,412	Venezuela ..	1922	2,278
Turkey ..	1935	5,370	Uganda ..	1935	2,187
Kenya ..	1933	5,225	Bolivia ..	1931	2,064
Tanganyika Territory	1935	4,793			

4. Imports and Exports of Cattle.—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details are as follows:—

CATTLE.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value. (a)	No.	Value. (a)	No.	Value. (a)
		£		£		£
1931-32 ..	40	8,543	371	2,870	331	— 5,673
1932-33 ..	98	12,464	287	5,375	189	— 7,089
1933-34 ..	208	33,983	323	6,683	115	— 27,300
1934-35 ..	161	30,382	224	3,891	63	— 26,491
1935-36 ..	164	33,527	240	3,283	76	— 30,244

(a) Australian currency values.

Note.—The minus sign (—) signifies net imports.

The average value of the cattle imported during the last five years was £177 3s. 11d. per head, while the average value of the cattle exported during the same period was £15 3s. 0d. As previously stated, the imported cattle were required principally for stud purposes.

5. **Cattle Slaughtered.**—The number of cattle slaughtered during each of the years 1931 to 1935 is given hereunder :—

CATTLE (INCLUDING CALVES) SLAUGHTERED.

Year.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N. Ter.	Fed. Cap. Ter. (a)	Total.
1931	630,372	375,380	540,649	81,285	91,748	28,565	1,844	1,349	1,751,192
1932	704,646	427,644	596,975	89,350	91,359	30,335	1,899	1,506	1,943,714
1933	769,776	471,895	719,277	104,488	99,217	34,558	4,363	1,616	2,205,190
1934	974,749	593,248	851,393	140,170	110,124	37,581	4,358	1,791	2,713,414
1935	1,100,472	774,395	866,410	153,686	120,123	39,588	1,531	1,620	3,057,825

(a) For year ended 30th June of year following.

6. **Production and Consumption of Beef.**—The production of beef in Australia during the year 1935-36 was estimated at 1,098,139,000 lb. The requirements of the local market absorbed 82,442,000 lb., approximately 82 per cent., leaving a balance of 201,690,000 lb., or 18 per cent., which was exported as frozen, chilled or canned beef. (See also § 1 par. *ante*.)

7. **Exports of Frozen Beef.** The export of frozen meat from Australia dates from about the year 1881, and since that year the trade has grown considerably, the quantities and values exported during the past five years being as follows :—1931-32, 165,872,145 lb., £2,087,829; 1932-33, 153,972,800 lb., £1,854,582; 1933-34, 173,076,092 lb., £2,020,050; 1934-35, 212,099,109 lb., £2,559,605; and 1935-36, 196,823,248 lb., £2,481,896. Since 1932-33 chilled beef to the extent mentioned hereunder has been included in the foregoing. (See Table in § 1 par. *ante*.) The largest purchaser of Australian beef is the United Kingdom, which during the year 1935-36 took £2,117,429 worth, or about 85.3 per cent., of the total shipments. Other countries importing Australian beef were in order of importance Egypt, Malta, Japan, Malaya (British), Philippine Islands and Belgium. These countries, together with the United Kingdom, accounted for 96.4 per cent. of the total value of export.

Owing to the distance of Australia from the chief markets of the world meat could be exported only in a frozen condition. In view of the preference for chilled beef, this circumstance placed the beef industry in Australia at a serious disadvantage in the past. Investigations conducted by the Council for Scientific and Industrial Research in Australia and the Low Temperature Research Station at Cambridge in England have proved, however, that chilled beef can be successfully transported from Australia to the United Kingdom. Trial shipments of 251,000 lb. were made during 1932-33 and 1,515,000 lb. in 1933-34. The success of these shipments indicated the practicability of Australia entering the chilled beef trade and exports increased during subsequent years in the following manner :—1934-35, 21,570,928 lb., £322,239; 1935-36, 23,193,737 lb., £348,047; and 1936-37, 41,959,695 lb., £608,172.

8. **Agreements Regarding Meat at the Ottawa Conference.** A stimulus to the Australian meat industry was provided by the agreement at the Imperial Economic Conference at Ottawa in August, 1932, under the terms of which the Government of the United Kingdom undertook to regulate importations of foreign meat from 1st January, 1932.

This matter is more specifically referred to in § 2 par. 6 of Chapter XVI.—Trade. Details of imports of beef, mutton and lamb into the United Kingdom during the period 1932 to 1936 will be found in the following table:—

9. Imports of Chilled and Frozen Beef into the United Kingdom.—The following statement shows the quantities and values of chilled and frozen beef imported into the United Kingdom during each of the five years 1932 to 1936:—

IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES INTO THE UNITED KINGDOM.

Country of Origin.	1932.	1933.	1934.	1935.	1936.
CHILLED—QUANTITY.					
	cwt.	cwt.	cwt.	cwt.	cwt.
Brazil	481,151	517,022	509,103	508,512	508,653
Uruguay	503,855	560,392	560,997	501,590	544,921
Argentine Republic	7,804,366	6,951,833	6,942,113	6,937,141	7,109,114
Other Foreign Countries .. .. .	..	..	..	..	..
British	9,369	142,073	238,445	478,336	617,303
Total Chilled	8,798,741	8,171,320	8,250,658	8,485,549	8,779,991

CHILLED—VALUE.					
	£	£	£	£	£
Brazil	980,342	834,363	798,693	793,741	809,936
Uruguay	986,489	953,839	937,456	907,452	838,449
Argentine Republic	16,198,019	12,832,259	11,695,034	11,529,888	12,010,908
Other Foreign Countries .. .. .	..	..	..	..	..
British	13,807	214,804	380,422	728,673	900,966
Total Chilled	18,178,657	14,835,265	13,811,605	13,959,754	14,560,259

FROZEN—QUANTITY.					
	cwt.	cwt.	cwt.	cwt.	cwt.
United States of America .. .. .	..	..	..	..	..
Brazil	24,544	5,333	5,473	11,245	3,421
Uruguay	98,806	27,815	40,050	41,971	35,021
Argentine Republic	149,800	113,910	97,234	93,933	113,666
Other Foreign Countries	1,090	..	..	..	..
Australia	814,362	947,142	1,322,855	1,104,511	1,055,786
New Zealand	362,003	431,007	697,146	404,758	277,900
Other British Countries	1,244	5,485	4,866	4,509	4,248
Total Frozen	1,451,849	1,530,692	2,168,524	1,720,927	1,490,942
Grand Total (Chilled and Frozen)	10,250,590	9,702,012	10,419,182	10,206,476	10,270,933

IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES
INTO THE UNITED KINGDOM—*continued.*

Country of Origin.	1932.	1933.	1934.	1935.	1936.
FROZEN—VALUE.					
	£	£	£	£	£
United States of America ..	..	..	..	..	..
Brazil	47,788	7,327	7,635	17,417	5,230
Uruguay	183,100	42,001	63,800	78,018	62,127
Argentine Republic ..	270,653	181,307	153,758	159,524	172,843
Other Foreign Countries ..	1,526	..	..	..	..
Australia	1,185,849	1,212,096	1,660,554	1,481,103	1,317,389
New Zealand	479,757	510,518	824,611	600,849	344,007
Other British Countries ..	2,282	7,671	5,578	6,134	6,143
Total Frozen ..	2,176,964	1,961,820	2,715,936	2,349,045	1,907,739
Grand Total (Chilled and Frozen) ..	20,355,621	16,797,085	16,527,541	16,308,799	16,467,998

§ 4. Sheep.

1. Initiation of the Pastoral Industry.—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool were, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and, while it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.

2. Distribution throughout Australia.—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of the mother State, New South Wales has maintained the premier position in sheep-raising. Within its borders is contained generally one half of the sheep of Australia, and in the years 1924 to 1927 even this high percentage was exceeded.

Fluctuations in the number of sheep recorded for each year in Australia from 1860 onwards may be seen from the graph on page 651. Five marked periods of decline depleted the numbers at successive intervals, but these gaps were quickly restored. Since 1925 the sheep flocks have exceeded 100 millions, reaching 113,048,037 in 1934.

the greatest number ever recorded in Australia. At no previous period have such large numbers been depastured continuously, and the development has taken place notwithstanding an average annual slaughter of about eighteen million sheep and lambs for the mutton and lamb trade.

The numbers of sheep in the several States and Territories for each year from 1932 to 1935 with an estimate at the 31st December, 1936, are as follows:—

SHEEP.—NUMBER.

31st Dec	New South Wales. (a)	Victoria. (a)	Queensland.	South Australia.	Western Australia.	Tasmania.	Nor. Ter.	Fed. Cap. Ter. (a)	Total.
1932	53,698,236	17,512,394	21,312,865	7,713,236	10,417,031	2,040,564	13,250	214,355	112,926,931
1933	52,104,000	17,195,909	20,072,904	7,911,060	10,322,550	2,038,450	13,356	219,343	109,667,083
1934	53,327,000	16,783,631	21,574,182	7,884,919	11,197,156	2,038,450	13,356	219,343	113,048,037
1935	51,939,000	17,157,291	18,000,000	7,115,112	11,821,672	2,000,000	25,000	244,000	108,217,215
1936b	55,300,000	17,663,103	20,125,000	7,905,112	8,955,000	2,000,000	25,000	244,000	112,217,215

(a) 31st March year following.

(b) Estimate as at 31st December, 1936.

3. *Proportion in the Several States and Territories.*—Apart from the effect of drought the relative numbers of sheep depastured in the different States remain fairly constant. Decreases were recorded in several of the States during 1935, but the losses in Queensland owing to drought were mainly responsible for the decline in the number of sheep in Australia during the year.

The percentage distribution in 1935 was:—New South Wales, 47.70; Victoria, 16.03; Queensland, 16.59; South Australia, 7.30; Western Australia, 10.18; Tasmania, 1.97; Northern Territory, 0.02; Federal Capital Territory, 0.21 per cent.

4. *Comparison with other Countries.*—As regards the size of its flocks and the quantity and quality of wool produced Australia has long occupied a leading position amongst the sheep-raising countries of the world. The following figures taken mainly from the *Year Book of the International Institute of Agriculture* represent the latest returns available in regard to the number of sheep in the principal wool-producing countries. The leading position is held by Australia, with 109 million, followed by the Soviet Union with 73 million, the United States of America with 53 million and India (British and Native), 43 million. On account of drought, the number of sheep in the Union of South Africa dropped from 46 million in 1933 to 36 million in 1935. In Argentine Republic sheep flocks also declined from 44.1 million in 1930 to 38 million in 1935, and one of the reasons was stated to be the increased employment of land for agricultural purposes. During the years 1925 to 1929 the sheep flocks of the Soviet Union exceeded those of Australia. The maximum number recorded was 130,000,000 in 1928, but after that year a remarkable decline took place and the number depastured in 1934 was only 46,848,000. In 1936 the number was stated to be 73,300,000, inclusive of about 5,000,000 goats. It was proposed under the second Five Year Plan to increase the number to 85 million by 1937. Russian sheep are almost entirely coarse-woolled and the poor quality wool does not ordinarily figure in world trade. Efforts are being

made, however, by the Soviet Government to improve the quality of the wool and the quantity shorn per fleece by cross-breeding with merinos. In 1928-29 and 1929-30, 2,031 and 5,006 sheep, valued at £6,017 and £13,606 respectively, were exported from Australia to the Soviet Union for breeding purposes. As pointed out in par. 5 following, however, the export of stud sheep is subject to control. Production of wool in the Soviet Union apparently amounted to about 167 million lb. only during the year 1935. This represents an average weight of fleece shorn of under 3 lb., which is considerably less than half of that obtained in Australia :—

SHEEP.—NUMBERS IN VARIOUS COUNTRIES.

Country.	Year.	No. of Sheep (,000 omitted).	Country.	Year.	No. of Sheep (,000 omitted).
Australia ..	1936	112,217	French Morocco ..	1936	9,265
Soviet Union (a) ..	1936	73,300	Bulgaria ..	1926	8,740
United States of America ..	1936	52,576	Greece ..	1935	8,185
India (British and Native) ..	1935	42,612	Algeria ..	1935	6,416
Argentine Republic	1935	38,000	Chile ..	1930	6,264
Union of South Africa	1935	35,996	Bolivia ..	1931	5,232
New Zealand ..	1936	30,114	Iraq ..	1936	4,783
United Kingdom ..	1936	25,023	Tanganyika Territory (a) ..	1936	4,478
China ..	1935	20,957	Germany ..	1936	4,331
Spain ..	1933	19,093	Mexico ..	1930	3,674
Iran ..	1934	16,019	Canada ..	1936	3,370
Uruguay ..	1932	15,406	Portugal ..	1934	3,274
Brazil ..	1935	13,049	Kenya ..	1930	3,236
Turkey ..	1935	12,436	Tunis ..	1935	3,210
Rumania ..	1935	11,838	Irish Free State ..	1936	3,062
Peru ..	1929	11,209	Manchuria ..	1935	3,060
France ..	1936	9,788	Poland ..	1936	3,024
Yugoslavia ..	1935	9,211	Somaliland ..	1935	2,500
Italy ..	1936	8,863	Sudan (Anglo-Egyptian) ..	1936	2,250
French Equatorial and West Africa ..	1935	8,392	Syria and Lebanon	1935	2,057
			Nigeria ..	1932	2,000

(a) Including goats.

5. Oversea Imports and Exports of Sheep.—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. During the last five years the principal consignments of ordinary sheep have been made to Malaya (British) from the State of Western Australia. The purchases by buyers from New Zealand, South Africa, Soviet Union and Japan at the Australian Stud Sheep Sales in previous years opened up a regular export trade with these countries in stud sheep. On the 27th November, 1929, however, the export of stud sheep was prohibited, except with the approval of the Minister for Trade and Customs. Consequently exports declined during 1931-32 and amounted to 297 sheep only, valued at £1,702, as compared with 6,389 valued at £32,933 in 1929-30. In 1935-36 exports for breeding purposes amounted to 9,210 sheep valued at £27,006, of which 8,590 sheep valued at £22,373 were shipped.

to Japan. The ordinary sheep exported from Australia are, for the most part, to Malaya and the Pacific Islands. The following table shows the imports and exports of stud and ordinary sheep for the years 1931-32 to 1935-36 :—

SHEEP.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
		£		£		£
1931-32 (a) ..	1,566	8,326	48,697	16,822	47,131	8,496
1932-33 (a) ..	1,725	9,843	53,546	22,497	51,821	12,654
1933-34 (a) ..	1,522	12,906	44,436	27,346	42,914	14,440
1934-35 (a) ..	1,377	15,233	59,559	45,351	58,182	30,118
1935-36 (a) ..	2,167	18,917	66,507	54,979	64,340	36,062

(a) Australian currency values.

6. **Sheep Slaughtered.**—The numbers of sheep slaughtered in the several States during each of the years from 1931 to 1935 were as follows :—

SHEEP (INCLUDING LAMBS) SLAUGHTERED.

Year.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Nor. Ter.	Fed. Cap. Ter.(a)	Total.
1931..	6,894,961	5,678,252	1,761,974	1,378,931	1,038,672	399,904	540	23,448	17,176,682
1932..	7,534,585	7,139,449	1,564,786	1,279,143	1,044,493	424,519	790	25,444	19,013,209
1933..	7,180,612	7,773,289	1,299,285	1,495,127	1,092,222	366,156	900	25,367	19,232,958
1934..	6,820,477	7,646,070	1,275,936	1,591,054	1,079,516	349,044	..	22,207	18,793,304
1935..	6,054,749	7,691,488	972,458	1,642,550	1,100,663	351,684	..	21,948	17,895,540

(a) Year ended 30th June year following.

7. **Production and Consumption of Mutton and Lamb.**—The production of mutton and lamb during the year 1935-36 amounted to 674,837,000 lb., of which 495,207,000 lb., or 73 per cent., was consumed locally, leaving a balance of 179,630,000 lb. or 27 per cent. for exportation. (*See also* § 1 par. 10.)

8. **Exports of Frozen Mutton and Lamb.**—The export trade of mutton and lamb preserved by cold process expanded rapidly until 1913 when 205 million lb. were dispatched. Progress was interrupted during the war years and exports declined thereafter to a very low figure. The high wool prices which prevailed during the post war years were no doubt a factor in causing this decline. In 1919-20 and in 1922-23 large shipments were made aggregating 247 million lb. and 168 million lb. respectively, but these were isolated cases. Prior to 1923-24 the shipments consisted mainly of frozen mutton, but from that year onwards lamb supplanted mutton and there has been an almost uninterrupted increase in the quantity of lamb shipped overseas each year.

The quantity and value of the shipments of mutton and lamb during each of the last five years were as follows :—Lamb, 1931-32, 106,599,787 lb., £2,219,975 ; 1932-33, 121,802,858 lb., £2,165,175 ; 1933-34, 124,755,938 lb., £2,803,138 ; 1934-35, 135,879,651 lb., £3,515,230 ; 1935-36, 151,377,838 lb., £4,020,163. Mutton, 1931-32, 58,681,549 lb., £774,087 ; 1932-33, 44,994,653 lb., £532,049 ; 1933-34, 46,351,359 lb., £682,795 ; 1934-35, 60,314,351 lb., £960,479 ; 1935-36, 26,629,544 lb., £445,580.

As with beef, the principal customer in this trade is the United Kingdom, which absorbed 98 per cent. of the total quantity exported from Australia during the year 1935-36.

9. **Resolutions at Ottawa Conference.**—Reference has already been made to the agreement reached at the Imperial Economic Conference at Ottawa regarding the regulation of imports of meat into the United Kingdom. (*See* § 3 par. 8 *ante*.)

10. Imports of Frozen Mutton and Lamb into the United Kingdom.—The quantities and values of frozen mutton and lamb imported into the United Kingdom from various countries for the five years ended 1936 are given in the following table :—

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM.

Country of Origin.	1932.	1933.	1934.	1935.	1936.
MUTTON—QUANTITIES.					
	cwt.	cwt.	cwt.	cwt.	cwt.
Chile	151,195	140,282	82,258	89,326	95,759
Brazil	462	1,782	..	..	..
Uruguay	31,649	33,324	13,690	6,232	8,240
Argentine Republic ..	354,233	217,174	137,748	150,423	121,907
Other Foreign Countries ..	286	..	2,895	2,870	2,063
Total, Foreign ..	537,825	392,562	236,591	248,851	227,969
Australia	190,952	347,409	461,259	424,050	227,218
New Zealand	1,335,884	998,547	898,965	1,041,563	888,864
Other British Countries ..	873	1,763	..	..	350
Total, British ..	1,527,709	1,347,719	1,360,224	1,465,613	1,116,432
Grand Total ..	2,065,534	1,740,281	1,596,815	1,714,464	1,344,401
MUTTON—VALUE.					
	£	£	£	£	£
Chile	216,577	214,655	163,574	129,856	177,128
Brazil	659	2,412	..	..	..
Uruguay	58,559	54,863	23,260	10,635	13,945
Argentine Republic ..	555,712	348,525	261,398	223,070	219,405
Other Foreign Countries ..	534	..	4,744	3,984	3,204
Total, Foreign ..	832,041	620,455	452,976	367,545	413,682
Australia	296,577	513,354	845,228	693,878	422,096
New Zealand	2,083,185	1,612,378	1,716,799	1,754,111	1,616,773
Other British Countries ..	1,621	2,888	..	..	613
Total, British ..	2,381,383	2,128,620	2,562,027	2,448,598	2,039,487
Grand Total ..	3,213,424	2,749,075	3,015,003	2,816,143	2,453,169

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM—
continued.

Country of Origin.	1932.	1933.	1934.	1935.	1936.
LAMB—QUANTITIES.					
	cwt.	cwt.	cwt.	cwt.	cwt.
Iceland	30,661	15,236	..	..	..
United States .. ..	..	..	..	..	..
Chile	144,952	124,368	124,067	118,554	111,209
Brazil	4,841	9,929	..	..	..
Uruguay	131,220	138,637	124,702	130,176	117,888
Argentine Republic ..	1,017,417	929,420	783,868	754,827	778,170
Other Foreign Countries ..	266	..	27,641	28,561	37,236
Total, Foreign ..	1,329,357	1,217,590	1,060,278	1,032,118	1,044,509
Australia	961,140	956,948	1,165,848	1,360,158	1,272,046
New Zealand	2,570,958	2,736,546	2,655,611	2,591,399	2,641,880
Other British Countries ..	85	1,404	242	18	558
Total, British ..	3,532,183	3,694,898	3,821,701	3,951,575	3,914,484
Grand Total ..	4,861,540	4,912,488	4,881,979	4,983,693	4,958,993

LAMB—VALUE.

	£	£	£	£	£
Iceland	58,784	38,718	..	..	..
United States .. ..	..	..	..	..	..
Chile	347,020	290,447	365,115	271,858	316,386
Brazil	4,046	20,421	..	..	..
Uruguay	315,141	314,292	311,953	327,257	316,441
Argentine Republic ..	2,357,467	2,151,109	2,051,554	1,898,688	2,091,908
Other Foreign Countries ..	945	..	67,008	77,642	101,211
Total, Foreign ..	3,083,403	2,814,987	2,705,630	2,575,445	2,825,046
Australia	2,199,041	2,395,193	3,320,964	3,934,693	3,707,390
New Zealand	7,154,472	7,435,731	8,414,183	8,063,996	8,266,051
Other British Countries ..	290	3,615	674	51	1,529
Total, British ..	9,353,803	9,834,539	11,735,821	11,998,740	11,974,970
Grand Total ..	12,437,206	12,649,526	14,531,451	14,574,185	14,800,016

§ 5. Wool.

1. *General.*—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep Australia produces one quarter of the world's supply. Moreover, half of the world's production of fine quality merino wool is produced in Australia. The bulk of the production is exported, but with the greater activity of Australian woollen mills the quantity used locally is increasing; the amount so used represented 7 per cent. of the total production in 1935-36.

The important position held by Australia among the principal sheep and wool producing countries of the world is more clearly shown in the following table:—

SHEEP AND WOOL.—PRINCIPAL PRODUCING COUNTRIES.

Country.	Year.	No. of Sheep (in millions).	Wool Production (in millions of lb., greasy).
Australia	1935-36	108.9	971
United States of America ..	1935-36	52.6	453
Soviet Union	1935-36	54.2	167
Argentine Republic ..	1935-36	38.0	360
Union of South Africa ..	1935-36	36.0	250
New Zealand	1935-36	29.0	272

2. Greasy and Scoured Wool.—Whether the weight of the wool clip should be stated as “in the grease” or as “scoured or washed” is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of extraneous matter and grease in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, while it varies also with the breed and the condition of the sheep. There is, moreover, no clearly defined standard in regard to the cleanliness of wool described as scoured or washed. Consequently, any comparisons of the weight of the Australian clip for different years or seasons whether on a greasy or a scoured basis cannot be regarded as exactly similar. After extensive inquiry, however, by this Bureau it has been accepted that, for the purpose of converting the Australian clip from the greasy to the clean category, the clean weight may be estimated at 46.15 per cent. of the greasy weight; in other words, 2½ lb. of greasy wool are equivalent to 1 lb. of clean wool.

The quantity of scoured or washed Australian wool exported during the last five years was approximately 16 per cent. of the total wool exports regarded as “greasy”.

3. Production.—(i) *Quantity.* The bulk of the Australian wool production is shorn from live sheep. Approximately 6 per cent. is obtained by fellmongering and about 5 per cent. is on exported skins. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table gives the production for each of the last five seasons, but the figures shown for 1936-37 have been estimated and therefore are subject to revision. Particulars of the gross value of wool produced in Australia are also shown. These values are based upon the average price of greasy wool realized at auction in the principal markets of the Commonwealth:—

WOOL.—TOTAL PRODUCTION.

State.	1932-33.	1933-34. *	1934-35.	1935-36.	1936-37. (c)
	lb.	lb.	lb.	lb.	lb.
New South Wales (a)	533,710,404	480,152,493	496,876,887	474,359,226	495,600,000
Victoria	170,807,900	161,146,436	156,761,979	163,397,806	161,300,000
Queensland	185,833,546	169,989,516	174,088,413	142,793,328	160,000,000
South Australia ..	75,727,946	79,288,903	77,790,933	81,700,140	78,000,000
Western Australia ..	81,307,832	85,118,808	95,836,161	92,458,073	60,800,000
Tasmania	15,200,000	14,200,000	14,035,000	16,300,000	15,000,000
Northern Territory (b)	35,000	35,000	35,000	35,000	35,000
Total—Quantity	1,062,622,628	995,931,156	1,015,424,373	971,053,503	970,735,000
	£	£	£	£	£
Value	38,600,000	63,037,000	40,446,000	55,186,000	66,950,000

(a) Including Federal Capital Territory.
Subject to revision.

(b) Approximate figures.

(c) Preliminary.

(ii) *Estimate for 1937-38.* No official information is yet available in regard to the production of wool for the season ended June, 1938. In many parts the wool is not yet shorn. At the joint annual conference of the National Council of Wool Selling Brokers and the Australian Wool Growers Council, it was stated that the production was expected to approximate 3,146,000 bales. Should this estimate be realized the total production of wool in Australia for 1937-38 would approximate about 995,000,000 lb.

4. *Care Needed in Comparing Clips.*—In comparing successive clips allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

5. *World's Wool Production.*—The following table gives details of the world's wool production and shows the importance of Australia as a wool-producing country. Out of a total production of 3,668 million lb. in 1935-36, Australia produced 976.7 million lb., or 26.6 per cent. It is also interesting to note that the share of the British Empire in world production during the same year was estimated at 1,755 million lb., or 47.8 per cent.

WOOL.—WORLD'S PRODUCTION.

(In millions of lb., "greasy" basis.)

Countries.	Average Annual Pre-war Production. (a)	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Australia ..	741.4	1,007.5	1,062.3	995.9	1,015.4	976.7
United States ..	314.1	404.4	440.5	459.8	451.0	452.7
Argentine Republic ..	358.7	378.0	388.0	385.0	376.0	360.0
Union of South Africa ..	105.9	314.0	330.0	284.0	222.0	250.0
Soviet Union (Russia) ..	380.0	212.0	142.0	138.0	141.0	167.0
New Zealand ..	198.5	282.8	288.4	300.5	276.0	272.0
Uruguay ..	157.0	104.0	112.0	95.0	117.0	117.0
China (b) ..	100.0	110.0	110.0	110.0	110.0	110.0
United Kingdom ..	134.0	113.0	119.0	120.0	115.0	109.0
India (b) ..	100.0	100.0	100.0	100.0	100.0	100.0
Spain ..	72.0	77.5	80.5	70.0	73.0	66.0
Rumania ..	13.2	42.8	43.3	43.3	43.0	42.9
Persia ..	12.1	49.0	(b) 49.0	(b) 49.0	(b) 49.0	(b) 49.0
France ..	80.7	50.0	54.3	53.8	53.6	52.7
Turkey ..	118.0	41.3	41.3	38.9	37.6	43.5
Italy ..	55.0	44.0	42.0	41.0	36.0	(b) 36.0
Algeria ..	35.2	28.1	39.3	39.0	41.0	43.0
Chile ..	17.4	28.5	33.7	27.9	27.9	27.9
Brazil ..	35.0	35.0	33.7	35.3	36.4	36.4
Germany ..	52.0	32.4	31.5	31.3	32.2	36.3
Yugoslavia ..	25.4	27.8	29.5	29.8	30.1	31.0
Canada ..	11.2	20.4	20.5	19.2	19.5	19.4
Morocco (French) ..	14.9	23.1	26.4	27.0	28.3	32.5
Bulgaria ..	23.7	19.8	20.7	20.9	21.3	21.3
Irish Free State ..	..	19.3	19.6	19.6	17.0	16.5
Basutoland ..	..	9.3	11.8	9.9	5.1	7.3
Falkland Islands ..	..	3.9	3.9	4.0	4.0	4.2
Other Countries ..	71.2	201.7	189.3	196.6	202.4	188.1
Total ..	3,286.6	3,845.6	3,862.5	3,744.7	3,680.8	3,668.4

(a) Average for years 1909 to 1913 inclusive.

(b) Estimated.

6. **Consumption of Locally Processed Wool.**—It is impossible to obtain particulars of the total consumption of wool in Australia, as considerable quantities of manufactures of wool are imported. It is possible, however, to secure with reasonable accuracy the quantities of wool used in Australian factories and mills to produce woollen cloth and other woollen goods, such as hosiery and knitted ware. Some difficulties arise in the aggregation of returns from individual mills concerned only with one process in the manufacture of the completed article and whose output constitutes the raw material of other mills. It is believed, however, that the risk of duplication has now been reduced to a minimum and that the figures stated below can be accepted as substantially accurate. Reference is made to the woollen mills established in Australia in Chapter XXIV.—Manufacturing Industry.

For reasons mentioned in § 5 par. 2 above, the factor used for converting wool in terms of scoured, tops, yarn, etc., to a greasy basis must be regarded as approximate.

CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.

(In terms of greasy.)

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	lb.	lb.	lb.	lb.	lb.
Wool used in Factories ..	56,640,414	73,687,412	71,753,128	66,371,388	80,869,982
Less Exports of Tops, etc.	6,989,644	8,969,090	11,376,674	10,988,590	11,373,056
Balance	49,650,770	64,718,322	60,376,454	55,382,798	68,496,926
Add Imports of Tops, etc.	508,934	625,070	505,040	370,080	708,914
Total	50,159,704	65,343,392	60,881,494	55,753,478	70,205,840

7. **Exports of Wool.**—(i) *Greasy—Quantities.* Of the total weight of greasy wool shipped overseas during the last five years 33 per cent. was sent to the United Kingdom, as compared with 38 per cent. dispatched in pre-war years. The other leading consignees since 1932-33 were Japan, 23 per cent.; Belgium 14 per cent.; France 10 per cent.; and Germany, 8 per cent. The balance of 12 per cent. was distributed among all other countries. The following table shows the quantities of “greasy” wool exported, and the principal countries of recorded destination:—

WOOL IN THE GREASE.—EXPORTS, AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	212,004,088	244,041,182	209,887,487	292,725,835	244,508,575	277,231,854
Other British Countries (a)	1,392,300	1,392,050	1,392,155	1,392,050	2,177,886	2,402,116
Belgium	55,143,706	80,832,720	92,649,202	124,169,015	102,501,997	127,522,152
France	149,835,046	122,536,429	65,017,851	75,760,160	64,602,287	70,251,126
Germany	106,344,696	111,763,527	113,529,765	27,220,023	27,116,447	40,836,650
Italy	4,381,197	63,090,517	58,519,566	17,094,730	4,502,302	35,912,386
Japan	7,262,683	196,847,697	170,444,050	196,125,519	234,518,700	84,043,616
Netherlands ..	(a)	2,255,552	3,270,646	16,450,416	15,296,631	9,302,711
Poland	(a)	5,497,748	9,051,704	12,058,260	12,679,782	12,281,023
United States of America	15,486,447	3,363,120	3,350,712	5,148,868	24,816,766	72,780,165
Other Foreign Countries	6,382,577	7,187,568	6,902,103	16,878,821	18,722,139	20,664,281
Total	556,841,340	849,927,425	735,823,780	785,784,621	751,887,602	759,327,680

(a) Included with Other Foreign Countries.

(ii) *Scoured and Washed—Quantities.* The exports of “scoured and washed” wool during the period shown were as follows:—

WOOL, SCOURED AND WASHED.—EXPORTS, AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13. (a)	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	32,032,577	33,277,812	31,765,177	34,462,119	31,860,364	33,614,477
Canada ..	(b)	1,325,251	1,736,020	1,225,817	1,445,371	3,933,470
Other British Countries ..	(b)	926,298	539,030	716,018	819,726	1,055,476
Belgium ..	7,528,058	10,101,445	14,091,550	10,733,445	10,681,773	8,872,981
France ..	16,068,910	9,828,929	5,863,131	9,843,830	10,835,868	7,680,853
Germany ..	12,310,967	8,919,763	11,140,270	2,879,686	3,927,532	3,510,872
Italy ..	265,442	2,547,945	2,552,684	728,040	129,176	593,359
Japan ..	1,888,161	4,147,808	1,788,995	549,812	1,261,865	299,573
Poland ..	(b)	1,095,878	1,526,197	1,187,583	7,995,743	794,351
Other Foreign Countries ..	252,995	1,105,918	1,420,058	4,164,117	4,567,106	7,388,264
Total ..	70,347,110	73,278,050	73,023,912	66,494,466	68,224,524	66,843,376

(a) Including “tops.”

(b) Included with Other Foreign Countries.

(iii) *Tops, Noils and Waste—Quantities.* Although tops were recorded separately the exports of Noils and Waste were included under scoured and washed wool in the Customs returns until 1931-32. These three items have been combined in the following table:—

WOOL TOPS, NOILS AND WASTE.—EXPORTS, AUSTRALIA.

Country to which Exported.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	1,309,028	2,022,055	2,480,627	2,251,031	1,810,423	1,263,245
Canada ..	1,200,909	1,507,084	1,746,531	2,040,586	2,081,330	2,194,586
India ..	182,973	199,503	79,217	118,407	99,023	170,822
Other British Countries ..	37,050	25,549	28,484	27,626	81,328	101,981
Belgium ..	80,230	2,152	18,028	455	144,713	7,052
Germany ..	125,882	104,844	73,506	..	..	626
Italy ..	..	22,391	85,911	345,451	84,355	..
Japan ..	533,355	565,655	1,074,130	477,008	553,084	184,574
Other Foreign Countries ..	18,900	30,479	95,793	228,235	818,475	1,565,974
Total ..	3,489,227	4,480,212	5,682,743	5,489,399	5,672,731	5,488,860

(iv) *Total Value of Exports.* The total value of the wool exported from Australia during the five years ending 1930-37 averaged 43 per cent. of the value of the total exports of merchandise of local origin, while during 1930-37 the proportion was approximately the same. The total value during the periods under review together with the principal countries to which wool was exported is shown in the next table:—

WOOL EXPORTS.—TOTAL VALUE, AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£	£
United Kingdom ..	10,608,067	11,470,076	17,766,180	10,000,777	18,170,110	23,010,701
Other British Countries ..	..	350,820	520,133	409,286	657,572	945,717
Belgium ..	2,546,915	3,376,311	6,864,323	5,433,157	6,184,099	8,545,125
France ..	6,494,832	4,996,827	4,691,794	3,558,066	4,413,359	5,458,800
Germany ..	5,131,282	4,561,530	8,698,904	1,511,094	2,052,436	3,520,874
Italy ..	202,434	2,567,680	4,237,212	807,775	273,549	2,606,127
Japan ..	516,528	7,969,600	12,127,621	8,680,119	14,594,465	7,513,332
Netherlands ..	(a)	119,867	303,841	825,971	1,058,533	688,017
Poland ..	(a)	281,268	784,069	617,064	968,108	914,330
United States of America ..	795,328	337,215	485,840	352,466	2,102,066	7,042,121
Other Foreign Countries ..	299,356	366,833	642,457	1,003,165	1,661,958	2,253,700
Total ..	26,592,642	36,407,933	57,125,526	39,265,940	52,345,561	62,522,263

(a) Included with Other Foreign Countries.

8. **Exports and Local Sales of Wool.**—Approximately 90 per cent. of Australian wool is now disposed of locally. Buyers from the United Kingdom, France, Belgium, Germany and other European countries, and from America, Japan, China and India attend the sales conducted in Sydney, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston. Particulars regarding exports and local sales, as well as quantities and proportions of the various descriptions of wool marketed in each State, will be found in the Production Bulletins issued by this Bureau.

9. **Value.**—Wool is the chief factor in the pastoral wealth of Australia, and the nation's prosperity is largely dependent upon the satisfactory sale of the clip. The heavy decline in the price of wool which commenced in 1929-30 continued during the three succeeding years. In 1933-34, prices rose in a remarkable manner, averaging 15.84d. per lb., compared with 8.72d. per lb. for the previous year, an increase of 81.0 per cent. This increase, however, was not sustained during 1934-35 when the price receded to 9.75d. In 1935-36 prices again rose to satisfactory levels and were more than maintained in 1936-37 when the price averaged 16.48d. per lb. The effect of this fluctuation upon the national income is reflected in the following figures. Based on the average auction room price of greasy wool the output for the season 1935-36 was valued at £55,186,000 compared with £40,446,000 in 1934-35, £23,000,000 in 1933-34, £38,600,000 in 1932-33, and £81,430,000 in 1924-25 when the record price was realized. On the average of the five seasons 1931-32 to 1935-36 the annual clip was valued at £46,500,000.

The value of the clip for 1936-37 is estimated at £66,950,000, but as complete details in regard to production are not yet available this figure is subject to revision.

The following table gives the average auction room price in Australia of greasy wool as compiled by the National Council of Wool-selling Brokers. This price represents the average price realized for all greasy wool of whatever type or quality marketed during the years indicated.

WOOL.—AVERAGE MARKET PRICE PER LB.

Description.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	d.	d.	d.	d.	d.	d.	d.
Greasy (a) ..	8.36	8.46	8.72	15.84	9.75	14.01	16.48

(a) National Council of Wool-selling Brokers.

Measured in terms of Australian, sterling and gold currencies the approximate values of greasy wool per lb. since 1929-30 were as follows:—

AVERAGE VALUE OF GREASY WOOL PER LB.—AUSTRALIA.

Year.	Australian Currency.	Sterling.	Gold Prices.
	d.	d.	d.
1929-30	10.29	10.29	10.29
1930-31	8.36	6.96	6.96
1931-32	8.46	6.69	5.10
1932-33	8.72	6.98	4.84
1933-34	15.84	12.65	8.19
1934-35	9.75	7.78	4.68
1935-36	14.01	11.19	6.79
1936-37	16.48	13.16	8.03

The average values shown in sterling and gold currencies have been calculated by converting the average prices shown in Australian currency on the basis of the average rate of exchange between the months of September and June in each year. Though not exact these results will suffice for general purposes.

10. **Wool Realization Scheme.**—The affairs of the British-Australian Wool Realization Association have been liquidated and consequently references to its operations which appeared in previous Official Year Books are not repeated in this issue.

11 United Kingdom Importation of Wool.—The appended statement of the quantity and value of wool imported into the United Kingdom during the year 1935 from the principal wool-producing countries shows the important position which Australia occupied in the supply of wool to the mother country :—

WOOL (a).—IMPORTS, UNITED KINGDOM, 1935.

Country.	Quantity.	Value.	Country.	Quantity.	Value.
	lb.	£		lb.	£
Australia ..	364,502,100	16,949,010	Other British Possessions ..	5,475,000	190,152
New Zealand ..	17,233,300	6,765,867	Peru ..	2,727,500	116,299
Union of South Africa ..	120,021,000	4,795,320	Belgium ..	2,972,400	191,150
Argentine Republic ..	82,573,400	2,114,660	Falkland Islands	2,760,800	80,294
India ..	40,774,000	1,254,149	Germany ..	949,700	43,428
Uruguay ..	19,826,100	853,916	United States of America ..	752,600	25,924
France ..	20,725,200	1,293,129	Other Countries	4,385,000	170,379
Chile ..	13,011,100	406,714			
Irish Free State	10,354,800	323,422	Total ..	864,060,500	35,582,813

(a) Greasy and Scoured.

Of the importations of wool into the United Kingdom, Australian wool represented 42 per cent. of quantity and 48 per cent. of value, and New Zealand 20 per cent. of quantity and 19 per cent. of value. Altogether, 716,136,900 lb., valued at £30,367,214, were received from British Possessions, these figures being equivalent to 83 per cent. of the total weight and 85 per cent. of the total value of all wool imported.

Preliminary figures show that during 1936, 914.2 million lb. of wool were imported into the United Kingdom: the chief sources of supply were Australia 358.9 million lb., New Zealand 232.7 million lb., Union of South Africa 108.9 million lb., and Argentine Republic 81.4 million lb., a total of 761.6 million lb. or 83 per cent.

12. Principal Importing Countries and Sources of Supply. The following table furnishes in respect of the principal importing Countries details of their production and imports of wool, together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured. They are also exclusive of any wool imported on skins.

WOOL.—PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY.

(In millions of lb.)

Importing Country.	Production (a) of Importing Country.	Quantity imported from—					Total Imports.
		Australia.	Union of South Africa.	Argentine Republic.	New Zealand.	Other Countries.	
United Kingdom ..	109.0	364.5	120.2	82.6	172.2	124.5	864.0
Belgium ..	0.7	138.5	19.2	23.1	4.2	49.8	234.8
Czechoslovakia ..	1.8	9.2	1.2	4.0	0.4	22.7	37.5
France ..	52.7	206.0	65.6	55.9	18.7	38.9	385.1
Germany ..	30.3	30.6	73.8	50.2	5.4	97.8	272.8
Italy ..	36.0	18.1	24.0	35.4	..	38.5	116.0
Japan ..	..	228.4	2.6	0.9	7.2	4.4	243.5
Poland ..	10.6	14.8	4.2	7.1	4.7	10.0	40.8
Spain ..	66.0	7.2	1.0	2.8	..	7.2	74.2
Soviet Union ..	167.0	8.1	..	..	..	62.3	70.4
United States of America ..	452.7	10.0	0.5	50.4	10.9	128.7	200.5
Total ..	..	1,041.4	312.3	321.4	223.7	578.8	2,477.6

(a) As in the grease.

In connexion with the total imports shown in the above table, it should be noted that a considerable transit trade exists between continental countries. It must not be assumed, therefore, that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with this transit trade are United Kingdom, Belgium, France and Germany. The quantities re-exported during 1935 were :—United Kingdom, 374.0 million lb., or 43.3 per cent. of the total imports ; Belgium, 117.2 million lb., or 49.9 per cent. ; France, 47.7 million lb., or 12.4 per cent. ; and Germany, 3.3 million lb., or 1.2 per cent.

13. *Inquiry into Wool Industry.*—(i) *General.* A Committee was appointed by the Commonwealth Government on the 15th August, 1932, to inquire into and report on the condition of the Australian Wool Industry. The report of the Committee was presented on the 24th November, 1932. The inquiry covered costs of production, prices, etc., and recommendations were made for the rehabilitation of the industry. For fuller details see Official Year Book No. 29, page 644.

§ 6. Trade in Hides and Skins.

1. *Extent of Trade.*—In addition to the hides and skins treated locally, considerable quantities are exported; the value of cattle and horse hides, and sheep and other skins sent overseas during the five years 1931–32 to 1935–36 amounted to £18,232,461, or an average of £3,646,492 per annum.

2. *Sheepskins with Wool.*—The exports of sheepskins with wool aggregating £9,693,769 during the five years constitute the largest item in the values referred to in the preceding paragraph. During the year 1935–36 France was the largest purchaser, taking 58 per cent. of the total consignments, while the United Kingdom ranked next with 21 per cent., followed by United States, with 12 per cent. The exports of sheepskins with wool during each of the years from 1930–31 to 1935–36 were as follows :—

SHEEPSKINS WITH WOOL.—EXPORTS, AUSTRALIA.

Particulars.	1930–31.	1931–32.	1932–33.	1933–34.	1934–35.	1935–36.
Number ..	12,016,672	9,146,335	10,448,928	11,478,513	10,765,364	11,811,480
Value £	1,949,048	1,106,195	1,382,583	2,627,309	1,772,595	2,805,083

3. *Sheepskins without Wool.*—Sheepskins without wool are exported chiefly to France and the United Kingdom. In 1935–36 the purchases of these two countries accounted for more than 74 per cent. of the total shipments. Quantities and values for the last five years are given in the table hereunder :—

SHEEPSKINS WITHOUT WOOL.—EXPORTS, AUSTRALIA.

Particulars.	1930–31.	1931–32.	1932–33.	1933–34.	1934–35.	1935–36.
Number ..	280,128	131,276	146,564	177,814	247,950	255,030
Value £	13,612	3,643	3,914	13,384	11,768	19,370

4. *Hides.*—(i) *Exports.* The export trade in cattle hides, which fell away during the depression years, has again become important. The consignments in 1935–36 were distributed as follows :—United Kingdom, £221,644 ; Japan, £130,785 ; Finland, £49,550 ; Italy, £39,958 ; Germany, £34,799 ; Canada, £28,046 ; Other Countries, £108,935.

The exports during the last five years are given in the table below :—

CATTLE HIDES.—EXPORTS, AUSTRALIA.

Particulars.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number ..	752,366	293,890	450,857	482,339	690,578	807,604
Value £	610,720	212,539	292,841	369,927	417,071	613,717

Calfskins exported during the years 1931-32 to 1935-36 numbered 1,149,014 valued at £248,181 and were shipped mainly to the United States of America, the value of the skins taken by that country averaging 59 per cent. of the total exports during the year 1935-36. The annual export of horse hides is very small, and averaged only 6,409 hides valued at £3,062.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the average value during the last five years amounting to £266,768. New Zealand is the chief source of supply, and small quantities are obtained also from the Pacific Islands, France and Italy. The numbers and values of cattle hides, including calfskins, imported into Australia during the years 1930-31 to 1935-36 were as follows :—

CATTLE HIDES.—IMPORTS, AUSTRALIA.

Particulars.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Quantity cwt.	41,888	46,702	76,529	64,447	90,703	64,902
Value (a) £	169,165	157,057	250,569	288,125	336,872	301,217

(a) Australian currency values.

The number of horse hides imported into Australia is small. The value of imports during 1935-36 amounted to £264 in Australian currency.

5. *Other Skins.*—The exports of skins other than those mentioned in the preceding paragraphs were valued as follows :—

OTHER SKINS.—EXPORTS, AUSTRALIA.

Description.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£	£
Rabbit and Hare	570,240	488,736	460,182	953,901	876,221	1,744,834
Opossum ..	215,711	333,209	29,177	7,832	134,044	18,938
Kangaroo ..	127,932	96,997	74,389	175,597	159,571	229,469
Fox ..	47,787	56,435	105,356	168,034	50,232	61,943
Wallaby ..	25,012	7,848	6,826	30,325	12,051	12,803
Other ..	7,230	2,509	2,238	6,779	4,583	5,966
Total ..	993,912	985,734	678,168	1,342,468	1,236,702	2,073,953

These skins were shipped principally to the United States of America and the United Kingdom, the values taken by each during 1935-36 being as follows :—

OTHER SKINS.—EXPORTS TO UNITED STATES AND UNITED KINGDOM, 1935-36.

Description.					United Kingdom.	United States of America.
					£	£
Rabbit and Hare	..	..	..	..	183,501	1,553,063
Opossum	..	..	..	..	11,634	7,069
Kangaroo	..	..	..	..	4,930	229,469
Fox	..	..	..	..	55,310	5,187
Wallaby	..	..	..	..	2,174	10,610
Other	..	..	..	..	982	836
Total	..	..	..	..	258,531	1,806,234

CHAPTER XX.

AGRICULTURAL PRODUCTION.

NOTE.—Except where otherwise stated, the "agricultural" years hereafter mentioned are taken as ending on 30th June.

§ 1. Introductory.

Preceding issues of the Official Year Book contain a brief reference to the attempts at cultivation by the first settlers in New South Wales, and to the discovery of suitable agricultural land on the Parramatta and Hawkesbury Rivers prior to the year 1813, and west of the Blue Mountains thereafter. (*See No. 22, p. 670.*)

§ 2. Progress of Agriculture.

1. **Early Records.**—In an "Account of Live Stock and Ground under Crop in New South Wales, 19th August, 1797," Governor Hunter gives the acreage under crop as follows:—Wheat, 3,361 acres; maize, 1,527 acres; barley, 26 acres; potatoes, 11 acres; and vines, 8 acres.

At a muster taken in 1808 the following was the return of crops:—Wheat, 6,874 acres; maize, 3,389 acres; barley, 544 acres; oats, 92 acres; peas and beans, 100 acres; potatoes, 301 acres; turnips, 13 acres; orchards, 546 acres; and flax and hemp, 37 acres.

By the year 1850 the area under crop had increased to 491,000 acres, of which 198,000 acres were cultivated in what is now the State of New South Wales, and 169,000 acres in Tasmania. At the end of 1850 the area under cultivation in Victoria, which was then the Port Phillip District of New South Wales, was 52,190 acres.

The gold discoveries of 1851 and subsequent years had at first a very disturbing effect on agricultural progress, the area under crop declining from 491,000 acres in 1850 to 458,000 acres in 1854. The demand for agricultural products occasioned by the large influx of population was, however, soon reflected in the increased area cultivated, for at the end of 1858 the land under crop in Australia exceeded a million acres. The largest increase took place in Victoria, which returned an area of 299,000 acres. For the same year South Australia had 264,000 acres in cultivation, Tasmania 229,000 acres, and New South Wales 223,000 acres.

2. **Progress of Cultivation.**—The following table shows the area under crop in each of the States and Territories of Australia at decennial intervals since 1860 and during each of the last five seasons:—

AREA UNDER CROP.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Ter.	Fed. Cap. Ter.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1860-1	246,143	387,283	3,353	359,284	24,705	152,860	..	..	1,173,628
1870-1	385,151	692,840	52,210	801,571	54,527	157,410	..	..	2,143,709
1880-1	606,277	1,548,809	113,978	2,087,237	63,902	140,788	..	..	4,560,991
1890-1	852,704	2,031,055	224,003	2,903,515	69,678	157,370	..	..	5,430,221
1900-1	2,446,767	3,114,132	457,397	2,369,680	201,338	224,352	..	..	8,813,660
1910-11	3,386,017	3,952,070	667,113	2,746,334	855,024	286,920	360	..	11,893,838
1920-21	4,465,143	4,489,503	779,497	3,231,083	1,804,987	297,383	296	1,966	15,069,858
1930-31	6,811,247	6,715,660	1,144,216	5,426,075	4,792,017	267,632	1,550	5,419	25,163,816
1931-32	5,108,554	5,407,109	1,216,402	5,219,870	3,961,459	247,353	1,030	5,123	21,166,900
1932-33	6,332,716	5,115,745	1,245,638	5,100,650	4,201,047	279,117	1,045	6,525	22,408,489
1933-34	6,283,051	5,200,013	1,313,438	5,078,558	4,215,300	288,399	1,250	6,407	22,454,327
1934-35	5,687,088	4,677,683	1,206,619	4,620,303	3,838,618	292,000	1,132	5,456	20,428,700
1935-36	5,735,681	4,138,761	1,334,600	4,463,103	3,751,158	242,189	1,070	4,430	19,971,042

The progress of agriculture was practically uninterrupted from 1860 to 1915-16, when, as the result of a special effort to raise wheat for the Allied Cause, 18,528,234 acres were cultivated in Australia. Four years later the area under crop was down to 13,296,407 acres owing to the accumulation of wheat stocks consequent upon the

difficulty of securing freight space during the war years. After the termination of hostilities the area again began to expand and rose steadily to a new maximum of 25,163,816 acres in 1930-31. Thereafter the slump in wheat prices seriously depressed the agricultural industry and the area under crop receded to less than 20 million acres in 1935-36. Wheat is the most extensively grown crop in Australia and material changes in the total area under crop are largely a reflection of variations in the acreage sown to this cereal.

3. **Artificially-sown Grasses.**—In all the States there are considerable areas under artificially-grown grasses mainly sown on uncultivated land after burning off the scrub, and not included in "area under crops." These areas are, however, liable to revert to their natural state, and the information respecting them is too uncertain for formal record.

4. **Australian Agricultural Council.**—Arising out of a conference of Commonwealth and State Ministers on agricultural and marketing matters held at Canberra in December, 1934, a permanent organization known as the Australian Agricultural Council was formed. The Council consists of the Federal Minister for Commerce, the Federal Minister in charge of Development and the corresponding State Ministers, with power to co-opt the services of other Federal and State Ministers as required. The principal functions of the Council are (i) the promotion of the welfare and development of agricultural industries generally; (ii) the improvement of the quality of agricultural products and the maintenance of high grade standards; (iii) to ensure, as far as possible, balance between production and available markets; and (iv) organized marketing, etc.

In addition a permanent technical committee known as the Standing Committee on Agriculture was formed to act in an advisory capacity to the Council and to undertake the following duties:—(i) to secure co-operation and co-ordination in agricultural research throughout Australia; (ii) to advise the Commonwealth and State Governments, either directly or through the Council, on matters pertaining to the initiation and development of research on agricultural problems; and (iii) to secure co-operation between the Commonwealth and States and between the States themselves, with respect to quarantine measures relating to pests and diseases of plants and animals, and to advise the Commonwealth and State Governments with respect thereto. The personnel of this Committee consists of the permanent heads of the State Departments of Agriculture, members of the Executive Committee of the Council for Scientific and Industrial Research, the Secretary of the Department of Commerce, and the Director-General of Health.

§ 3. Distribution, Production and Value of Crops.

1. **Distribution of Crops.**—The following table gives the areas in the several States under each of the principal crops for the season 1935-36:—

DISTRIBUTION OF CROPS, 1935-36.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat ..	3,851,373	2,323,753	230,631	2,080,490	2,540,609	10,104	..	1,610	11,956,906
Oats..	29,002	300,000	6,821	10,771	14,156	22,028	..	18	1,261,171
Maize ..	119,849	20,377	157,370	3	..	..	..	17	297,610
Barley—									
Malting ..	7,066	98,799	4,285	348,512	2,287	4,921	..	..	485,870
Other ..	4,517	17,572	2,005	45,229	9,281	106	..	..	79,000
Beans and Peas ..	92	8,285	104	15,551	2,571	24,916	..	..	51,510
Rye ..	5,936	1,117	161	691	435	135	..	..	8,475
Other Cereals..	21,705	..	..	131	88	382	..	..	22,300
Hay ..	658,810	1,140,361	71,309	566,004	494,195	74,741	..	1,090	3,007,170
Green Forage ..	610,401	111,956	379,651	98,121	197,931	28,500	..	548	1,423,203
Grass and other Seeds ..	..	8,222	7,720	6,520	..	1,688	..	..	24,130
Orchards and other Fruit Gardens ..	82,702	75,788	28,544	29,122	21,667	33,372	..	76	271,271

DISTRIBUTION OF CROPS 1935-36—continued.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Aus- tralia.
Vines—	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Productive ..	14,154	37,881	2,025	51,680	4,973	..	..	..	110,683
Unproductive ..	1,004	3,230	445	2,539	1,078	..	..	..	8,296
Market Gardens	7,026	20,633	950	1,555	3,074	812	..	52	34,102
Sugar Cane—									
Productive ..	10,416	..	228,515	..	..	..	..	..	238,931
Unproductive ..	9,794	..	86,185	..	..	..	..	..	95,979
Potatoes ..	22,743	44,287	13,620	4,612	4,046	11,710	..	62	124,680
Onions ..	85	5,441	1,023	432	108	6	..	5	7,108
Other Root Crops	2,856	4,088	3,877	802	266	3,038	..	9	16,993
Tobacco ..	934	5,840	3,117	141	426	80	..	..	10,538
Broom Millet ..	1,052	635	129	..	..	..	..	..	2,410
Pumpkins and Melons ..	4,611	1,246	13,517	322	698	24	..	3	20,421
Hops ..	..	123	..	..	12	882	..	..	1,017
Cotton ..	..	..	54,947	..	..	..	..	..	54,947
All other Crops	18,331	4,434	28,647	1,875	974	355	1,070	1	55,687
Total Area ..	5,735,681	4,438,761	1,334,690	4,463,163	3,754,158	242,189	1,070	4,330	19,974,042

2. **Relative Areas of Crops in States and Territories.**—Taking the principal crops, i.e., those cultivated to the extent of over 100,000 acres, the proportion of each in the various States and Territories on the total area under crop for the season 1935-36 is shown in the next table. In four of the States, viz., New South Wales, Victoria, South Australia and Western Australia, wheat-growing for grain is by far the most extensive whilst hay is second in extent. In Victoria and Western Australia the oat crop occupies third position, while green forage and barley rank third in New South Wales and South Australia respectively. In Queensland the most extensive crops are green forage, sugar cane, wheat and maize, and in Tasmania hay, potatoes, orchards and fruit gardens, and oats occupy the greatest area.

As pointed out previously wheat is the main crop in Australia, the area thereunder for grain and hay representing 64 per cent. of the total area under cultivation in 1935-36.

RELATIVE AREAS UNDER CROP, 1935-36.

[illegible]

3. Area under Chief Crops, Australia.—The area under the chief crops during each of the last five seasons, together with the average for the decennial period 1917-26 is shown hereunder:—

AREA UNDER CHIEF CROPS.—AUSTRALIA.

Crop.	Average, 1917-26.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.
Barley (a)	216	299	400	410	395	486
Maize	316	269	228	304	295	298
Oats	924	1,085	1,027	1,374	1,562	1,564
Rice .. .. .	..	19.6	22	20	22	22
Wheat	9,484	14,741	15,766	14,901	12,544	11,957
Green Forage	709	980	1,087	1,121	1,234	1,423
Hay	2,953	2,635	2,727	3,081	3,178	3,007
Beans and Peas	42	42	52	71	51	52
Onions	7	6	9	8	7	7
Potatoes (b)	135	145	147	110	131	125
Sugar Beet	1.5	3	3	3	3	3
Vineyards	90	113	114	116	117	119
Hops	1.5	1	1	1	1	1
Sugar Cane	208	326	307	329	322	335
Cotton	14	50	56	87	78	55
Tobacco	2	18	26	16	8	11
Market Gardens (c)	43	51	46	51	53	55
Orchards	272	273	274	282	278	271
All Other Crops	116	110	116	139	150	183
Total	15,534	21,167	22,408	22,154	20,429	19,971

(a) Malting only. (b) Not including Sweet Potatoes. (c) Including Pumpkins and Melons.

4. Total and Average Production, Chief Crops, Australia.—The following table shows the production of the chief crops for the five years ended 1935-36 and for the decennium 1917-1926:—

TOTAL AND AVERAGE PRODUCTION, CHIEF CROPS. -AUSTRALIA.

Crop.	Unit of Quantity.	Average, 1917-26.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Barley (a)	1,000 bushels	4,060	5,547	7,837	7,014	6,991	8,113
Maize .. .. .	..	8,151	7,062	5,066	7,194	8,101	7,168
Oats .. .. .	..	14,196	15,195	16,160	16,922	16,906	18,721
Rice .. .. .	..	8	1,350	1,901	2,172	1,888	2,104
Wheat .. .. .	..	117,724	190,612	213,927	177,338	133,393	144,218
Hay .. .. .	.. tons	3,595	3,167	3,571	3,583	3,811	3,498
Beans and Peas .. .. .	.. bushels	683	497	1,000	1,057	722	610
Onions .. .. .	.. tons	35	24	49	52	42	35
Potatoes (b) .. .. .	..	344	307	384	328	286	323
Sugar (Beet) .. .. .	..	2.1	5.4	5.7	5.3	5.0	5.1
Grapes .. .. .	..	172	324	410	362	361	364
Wine .. .. .	.. gallons	10,351	14,191	16,118	13,996	16,265	17,728
Raisins and Currants .. .. .	.. cwt.	501	1,207	1,540	1,370	1,335	1,281
Hops .. .. .	.. lb.	2,144	1,810	1,669	1,953	2,065	2,103
Sugar (Cane) .. .. .	.. tons	292	604	533	666	641	617
Cotton, Unginned .. .. .	.. lb.	5,399	15,245	6,270	17,718	26,924	20,785
Tobacco .. .. .	..	1,706	10,160	0	1,118	2,114	8
Pumpkins and Melons .. .. .	.. tons	49	58	38	54	51	62

(a) Malting only. (b) Not including Sweet Potatoes.

5. Average Yield per Acre, Chief Crops, Australia.—Details of the average yield per acre for Australia of the principal crops are shown hereunder for the periods indicated:—

AVERAGE YIELD PER ACRE, CHIEF CROPS.—AUSTRALIA.

Crop.	Unit of Quantity.	Average, 1917-26.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Barley (a)	bushel	18.81	18.55	19.60	17.09	17.69	17.31
Maize	"	23.66	20.21	22.20	21.67	27.46	25.09
Oats	"	15.37	14.00	15.73	12.32	10.83	11.97
Rice	"	40.57	63.91	80.30	107.36	88.74	99.64
Wheat	"	12.41	12.93	13.57	11.09	10.63	12.06
Hay	ton	1.21	1.20	1.31	1.16	1.20	1.16
Beans and Peas	bushel	16.28	11.90	19.14	14.97	11.02	11.95
Onions	ton	5.08	3.67	5.53	0.35	5.97	4.95
Potatoes (b)	"	2.56	2.74	2.61	2.35	2.19	2.50
Sugar Beet	"	1.37	1.70	1.80	1.04	1.13	1.02
Grapes (c)	"	2.46	3.03	3.78	3.31	3.30	3.20
Wine (c)	gallon	285	290	341	290	342	304
Raisins and Currants (c)	cwt.	18.49	22.83	29.02	25.00	24.52	23.43
Hops (c)	lb.	1,390	1,717	1,753	2,001	2,173	2,388
Sugar Cane (c)	ton	2.26	2.50	2.50	2.80	2.83	2.71
Cotton, Unginned (c)	lb.	370	679	209	280	620	378
Tobacco	"	790	572	426	291	302	527
Pumpkins and Melons	ton	3.48	3.13	2.54	2.84	2.91	3.02

(a) Malting only.

(b) Not including Sweet Potatoes.

(c) Per acre of productive crops.

6. Gross Value of Agricultural Production, Australia.—The following table shows the gross value of recorded agricultural production at the principal markets in each State for the years 1930-31 to 1935-36:—

GROSS VALUE OF AGRICULTURAL PRODUCTION.—AUSTRALIA.

Crops.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Barley (a)	£1,000 685	£1,000 829	£1,000 911	£1,000 884	£1,000 984	£1,000 1,030
Maize	1,017	1,193	1,134	1,277	1,298	1,610
Oats	1,437	1,448	1,550	1,853	1,910	2,130
Rice	295	207	352	302	383	400
Wheat	25,047	33,728	33,316	27,897	24,738	20,708
Green Forage	2,385	2,642	3,040	2,540	2,435	2,703
Hay	14,397	8,145	9,520	10,265	10,587	10,001
Beans and Peas	100	220	302	234	194	165
Onions	139	253	218	230	311	207
Potatoes (b)	1,690	2,073	1,791	1,005	2,491	2,501
Sugar Beet	82	86	73	91	76	77
Grapes	3,496	3,495	3,018	3,674	3,562	3,754
Hops	157	144	128	142	151	172
Sugar Cane	7,340	7,640	7,098	7,601	7,310	7,493
Tobacco	187	1,115	901	340	257	484
Cotton, Unginned	355	308	125	283	297	376
Market Gardens (c)	2,259	2,152	1,005	2,029	2,136	2,240
Orchards	7,086	7,030	7,414	7,082	7,343	7,702
Other Crops	1,617	1,682	1,640	2,013	1,994	2,335
Total, Gross Value	70,500	74,489	75,562	70,732	68,587	75,388

(a) Malting only.

(b) Not including Sweet Potatoes.

(c) Including Pumpkins and Melons.

7. Value of Production—Gross and Net.—In earlier issues of the Official Year Book up to No. 27 the gross, local and net values of agricultural production were shown for each of the years 1926-27 to 1932-33, computed in accordance with resolutions of the several Conferences of Australian Statisticians. It was apparent, however, that the

methods used in the various States were not in complete harmony and at the Conference held in March, 1935, attention was directed to the elimination of any existing differences in computation. The success achieved at that Conference makes it possible to present the value of agricultural production for 1933-34 and subsequent years on a basis of uniformity not hitherto attained. Sufficient time has not elapsed to enable the State Statisticians to carry this revision back to 1925-26 as is intended and consequently it is possible to publish results for the last three years only. A more detailed reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used will be found in Chapter XXVIII, § 9.

In computing the net value of production no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm machinery; consequently the figure stated is inflated to this extent.

GROSS, FARM AND NET VALUE OF AGRICULTURAL PRODUCTION.—AUSTRALIA, 1935-36.

(AS ESTIMATED BY STATE STATISTICIANS IN ACCORDANCE WITH CONFERENCE RESOLUTIONS.)

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation.
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in process of production.		
	£	£	£	£	£	£	£
New South Wales ..	10,775,000	1,000,000	16,700,000	2,800,000	700,000	13,585,000	840,000
Victoria ..	10,079,008	3,215,921	15,803,087	3,143,279	1,003,040	11,716,768	824,000
Queensland ..	12,381,000	870,000	11,502,000	995,000	808,000	9,699,000	600,000
South Australia ..	11,431,418	1,466,278	9,965,140	1,777,215	851,270	7,336,655	563,954
Western Australia ..	8,500,000	1,100,000	7,400,000	1,500,000	800,000	4,600,000	600,000
Tasmania ..	2,883,800	571,270	2,312,530	477,400	111,950	1,723,180	60,270
Total—							
1935-36 ..	75,102,654	11,565,632	63,537,022	10,709,940	4,328,089	48,438,993	3,514,894
1934-35 ..	68,439,685	11,842,411	56,597,274	9,003,817	4,457,259	43,136,198	3,497,623
1933-34 ..	70,670,428	13,600,575	57,069,853	8,459,625	4,911,958	43,692,270	3,374,295

(a) No deduction has been made for depreciation and maintenance.

§ 4. Wheat.

1. **Royal Commission on the Wheat Industry.**—A Royal Commission was appointed in January, 1934, to inquire into and report upon the economic condition of the industries of growing, handling and marketing wheat, and the manufacturing, distributing and selling of flour and bread. A searching inquiry was made by the Commission and the results of its investigations were submitted in a series of five reports. The first and second reports covered the wheat growing industry, the third, that of baking, the fourth, the flour milling industry, while the fifth, completed in February, 1936, dealt with the history of the Commission's investigations and traversed the principal recommendations submitted.

Reference to the financial assistance to the wheat industry will be found in § 18, Bounties hereafter.

2. **Progress of Wheat-growing.**—(i) *Area and Production.* (a) *Seasons 1931-32 to 1936-37.* Wheat is the principal crop raised in Australia, and its progress since 1860 has been almost continuous. Prominent features in its early development were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its

progress but its subsequent recovery was assisted by the invention of mechanical appliances, the recognition of superphosphate as an aid to production and the introduction of new and more suitable varieties for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion. The continued progress was interrupted by the Great War and the recent economic depression. As previously mentioned, any change in the area sown to this cereal dominates the changes in the total area under crop. The area and yield of wheat for grain are given below for each State for the five years ended 1935-36 and are shown from the year 1860 onwards in the graphs on pages 687, 688.

The figures in the table include an estimate for the 1936-37 crop, and the averages for the past decennium have also been inserted :—

WHEAT.—AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	3,682,945	3,565,872	248,783	4,071,370	3,158,888	11,722	1,733	14,741,313
1932-33 ..	4,803,943	3,230,955	250,049	4,066,782	3,389,352	20,985	3,438	15,765,504
1933-34 ..	4,584,092	3,052,921	232,053	3,821,795	3,183,216	24,097	3,087	14,901,271
1934-35 ..	3,892,768	2,458,583	221,729	3,188,225	2,764,373	16,656	1,844	12,544,178
1935-36 ..	3,851,373	2,323,753	239,631	2,989,490	2,540,606	10,404	1,610	11,956,966
1936-37 (a) ..	3,961,680	2,393,827	335,000	3,058,457	2,570,760	21,000	1,160	12,342,190
Average for ten seasons 1927-36 ..	4,039,648	3,249,682	215,890	3,511,927	3,117,375	19,499	1,763	14,185,784
PRODUCTION.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32 ..	54,966,000	41,955,856	3,863,894	48,093,102	41,521,245	182,913	29,178	100,612,188
1932-33 ..	78,870,000	47,843,129	2,493,902	42,429,614	41,791,866	433,031	65,439	123,926,081
1933-34 ..	57,057,000	42,613,106	4,361,614	35,373,466	37,305,100	560,665	66,852	177,337,803
1934-35 ..	48,678,000	25,850,528	4,076,181	27,455,600	26,985,000	307,523	40,398	133,393,232
1935-36 ..	48,822,000	37,552,062	2,690,316	31,615,744	23,318,417	186,014	30,216	141,217,700
1936-37 (a) ..	54,837,000	42,844,816	2,250,000	38,714,653	21,291,500	504,000	26,352	150,468,321
Average for ten seasons 1927-36 ..	51,234,971	39,490,730	3,350,712	32,963,496	36,368,584	420,197	32,017	163,860,707

(a) Subject to revision.

The acreage under wheat for grain increased steadily until 1915-16, when, largely as the result of a special war effort, 12,484,512 acres were sown. After that year, however, there was a serious decline, brought about by war conditions and unfavourable seasons, and the area in 1919-20 fell to 6,419,160 acres, or only half that of 1915-16.

From 1920-21 onwards there was a rapid extension of the area under wheat until in response to the urge of Commonwealth and State Governments the maximum area of 18 million acres was sown in 1930-31. The acreage declined to 14½ million acres in the following year, and after expanding by more than one million acres in 1932-33 declined heavily in the next three years to slightly under 12 million acres.

The reduction in acreage was of course brought about by the unprofitable prices for the grain during the depression years.

Seasonal conditions under which the wheat crop of 1935-36 were grown were generally favourable in all States excepting Western Australia. In Victoria the average yield of 16.16 bushels per acre considerably exceeded the average for the decennium ending that year (12.15 bushels). In South Australia the average of 10.58 bushels exceeded the ten year average by 1.10 bushels whilst in New South Wales the yields for both periods were practically identical. Seasonal conditions in Western Australia were not good; the average yield was only 0.18 bushels per acre or 2.38 bushels below the decennial average. The average yield per acre for Australia in 1935-36 amounted to 12.06 bushels, compared with 10.03 bushels for the previous year and 11.55 bushels, the average for the decennium ending 1935-36. The total production

of grain for 1935-36 amounted to 144.2 million bushels compared with 133.4 million bushels, the production of the previous year, and with 213.9 million bushels, the record harvest of 1932-33.

The annual production of wheat over the sixteen seasons ending with 1935-36 has exceeded 100 million bushels. It is the opinion of agricultural experts that, notwithstanding the vagaries of the weather, the improved methods of agriculture—seed selection, bare fallowing, application of fertilizers, etc.—will assure the wheat crop of Australia against total failure in the future.

Final figures are not yet available in respect of the 1936-37 wheat harvest, but the area sown according to the latest estimate was 12,342,000 acres, an increase of approximately 385,000 acres or 3 per cent. on that of the previous year, whilst the production was 150.5 million bushels, or 12.19 bushels per acre, compared with 144 million bushels or 12.06 bushels per acre for the previous year. The increase in acreage during 1936-37 was the first recorded since 1932-33, and with the maintenance of improved prices it is expected that a further increase will be recorded in 1937-38.

(b) *Area, Production and Prices, 1861-70 to 1921-30.* The following table gives the average area, production and yield per acre for decennial periods since 1861, together with the average wholesale price since 1871. The price quoted represents the average at Melbourne (Williamstown), and may be accepted as fairly representative for Australia.

WHEAT.—AVERAGE AREA, PRODUCTION AND WHOLESALE PRICE, AUSTRALIA.

Period.	Area.	Production.	Yield per Acre.	Average Wholesale Price.
	Acres.	Bushels.	Bushels.	s. d.
1861-70	831,457	10,621,697	12.77	(a)
1871-80	1,646,383	17,711,312	10.76	5 1
1881-90	3,257,709	26,992,020	8.29	4 7
1891-1900	4,086,701	29,933,993	7.32	3 8
1901-10	5,711,230	56,058,070	9.82	3 10
1911-20	8,927,974	95,479,866	10.69	5 0
1921-30	11,290,543	135,399,860	11.99	5 8

(a) Not available.

(ii) *Average Yield.* In the next table will be found the average yield of wheat per acre for specified periods:—

WHEAT.—YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32 ..	14.92	11.77	15.53	11.81	13.14	15.61	16.84	12.93
1932-33 ..	16.42	14.81	9.97	10.43	12.33	20.64	19.03	13.57
1933-34 ..	12.45	13.96	18.80	9.26	11.72	23.27	21.66	11.90
1934-35 ..	12.50	10.51	18.38	8.61	9.76	18.46	21.91	10.63
1935-36 ..	12.68	16.16	11.23	10.58	9.18	17.88	22.37	12.06
1936-37 (a)	13.84	17.90	6.72	9.39	8.28	24.50	17.97	12.19
Average 10 seasons, 1927-36	12.68	12.15	15.52	9.39	11.56	21.55	18.10	11.53

(a) Subject to revision.

Variations in the average yields are chiefly due to the vagaries of the seasons. The best average yields for single seasons were obtained in 1921-25, 15.20 bushels; in 1920-21, 16.08 bushels; and in 1866, 10.35 bushels. In the last mentioned year less than 1,000,000 acres of relatively fertile land were sown. Annual averages for the past three decennia were 10.81, 12.41 and 11.55 bushels per acre.

(iii) *Relation to Population.* The main wheat producing States of Australia are New South Wales, Victoria, South Australia and Western Australia. Queensland production closely approaches local demands, but Tasmania imports from the mainland to satisfy its needs though partly in exchange it ships flour made from local wheat which is particularly suitable for biscuits. Normally the production of wheat greatly exceeds Australian requirements, and from half to three-quarters of the crop is exported overseas. In the pre-war period 1909-1913 Australia ranked sixth on the list of exporting countries but the position has improved in recent years and its exports are now exceeded only by those of Canada and Argentine Republic. The quantity exported from Australia was approximately 20 per cent. of the total quantity shipped by exporting countries during the five years ended 1935.

3. *Wheat Farms.* Particulars of the number of farms growing wheat for grain on 20 acres and upwards during the past five years are shown in the following table. It should be remembered that a farm worked on the share system or as a partnership is included as one holding only.

**NUMBER OF FARMS GROWING WHEAT FOR GRAIN ON 20 ACRES AND UPWARDS.—
AUSTRALIA.**

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	No.	No.	No.	No.	No.
New South Wales ..	15,192	17,040	16,312	15,099	14,923
Victoria ..	14,846	15,299	14,319	12,582	12,051
Queensland ..	(a) 2,251	1,655	2,188	1,957	1,847
South Australia ..	13,456	13,434	13,133	13,053	11,974
Western Australia ..	9,808	9,532	9,032	9,101	8,681
Tasmania ..	195	378	413	275	171
Total ..	55,748	57,338	55,997	52,127	49,647

(a) Total number of farms growing wheat for grain.

4. *Australian and Foreign Wheat Yields.*—(i) *Average Yield.* The next table gives the average return per acre in the principal wheat-growing countries of the world, ranging from a maximum in the Netherlands of 43 bushels per acre to a minimum in Iraq of nearly 7 bushels per acre :—

WHEAT.—YIELD PER ACRE, VARIOUS COUNTRIES.

Country.	Average Yield in Bushels per acre.		Country.	Average Yield in Bushels per acre.	
	Average, 1933-1935.	1936.		Average, 1933-1935.	1936.
Netherlands ..	46.11	43.42	Chile ..	15.71	(e)16.65
Denmark ..	45.68	38.74	Yugoslavia ..	15.40	19.63
Irish Free State ..	40.71	30.79	Portugal ..	14.93	(e)16.06
Belgium ..	40.41	38.07	Spain ..	14.29	11.30
Sweden ..	36.34	30.93	Argentine Republic	14.24	15.70
United Kingdom ..	35.97	30.63	Greece ..	14.11	11.00
Switzerland ..	35.35	26.02	Manchuria ..	14.04	11.45
Germany ..	33.24	31.52	Turkey ..	12.86	15.61
New Zealand ..	31.31	32.27	Soviet Union ..	12.53	(e)12.34
Norway ..	29.33	28.10	Rumania ..	12.27	15.17
Japan ..	28.95	26.77	United States of		
Egypt ..	27.81	31.23	America ..	11.83	12.79
Czechoslovakia ..	26.62	24.27	Chosen ..	11.68	(e)12.19
Finland ..	25.39	25.28	Australia ..	11.55	12.19
Austria ..	25.29	21.56	Uruguay ..	11.37	10.56

WHEAT—YIELD PER ACRE, VARIOUS COUNTRIES—*continued.*

Country.	Average Yield in Bushels per acre.		Country.	Average Yield in Bushels per acre.	
	Average 1933-1935.	1936.		Average 1933-1935.	1936.
France ..	24.58	19.93	Canada ..	11.33	9.07
Italy ..	21.88	17.70	India ..	10.32	10.41
Latvia ..	21.18	16.51	Colombia ..	10.15	(e) 10.11
Hungary ..	20.70	21.12	Mexico ..	9.55	10.71
Lithuania ..	18.56	16.36	French Morocco ..	8.99	4.16
Poland ..	17.94	18.14	Algeria ..	8.97	6.99
Brazil ..	(a) 16.90	(c) 12.94	Union of South Africa ..	8.66	7.58
Estonia ..	16.58	15.02	Tunis ..	6.96	6.09
China ..	16.47	10.85	Palestine ..	6.29	(e) 6.84
Iran ..	(b) 16.44	(d) 15.91	Iraq ..	5.13	6.54
Bulgaria ..	16.00	20.97			
Syria and Lebanon	12.46	12.19			

(a) Average 1924-28. (b) Average 1933-34. (c) Year 1928. (d) Year 1934. (e) Year 1935.

(ii) *Total Production.* The latest available official statistics of the production of wheat in various countries are given in the following table:—

WHEAT.—TOTAL PRODUCTION, VARIOUS COUNTRIES.

Country.	Yield in Bushels (,000 omitted).		Country.	Yield in Bushels (,000 omitted).	
	Average, 1933-1935.	1936.		Average, 1933-35.	1936.
Soviet Union ..	1,089,696	1,132,801 ^b	French Morocco ..	29,509	12,236
China ..	811,929	847,956	Greece ..	27,081	23,450
United States of America ..	568,149	626,473	Sweden ..	25,919	21,524
India ..	355,339	351,902	Portugal ..	20,619	8,392
France ..	328,001	253,454	Netherlands ..	16,073	16,259
Canada ..	279,896	229,222	Syria and Lebanon	16,091	15,998
Italy ..	271,459	224,585	Union of South Africa ..	16,020	16,193
Argentine Republic	222,000	247,836	Belgium ..	15,976	16,153
Germany ..	181,320	162,661	Austria ..	14,477	13,514
Spain ..	161,021	121,493	Uruguay ..	13,480	10,501
Australia ..	151,650	150,468	Tunis ..	13,289	8,084
Rumania ..	97,356	128,717	Denmark ..	13,020	11,391
Turkey ..	96,834	138,498	Iraq ..	12,401	19,687
Hungary ..	81,801	86,745	Mexico ..	11,261	13,606
Yugoslavia ..	79,338	107,424	Lithuania ..	9,588	7,944
Poland ..	76,737	78,360	Chosen ..	9,301	(b) 9,748
Iran ..	(a) 69,453	(c) 70,941	New Zealand ..	7,943	7,150
United Kingdom	65,864	55,263	Latvia ..	7,099	5,273
Czechoslovakia ..	61,669	55,582	Switzerland ..	5,590	4,468
Bulgaria ..	47,658	59,304	Brazil ..	5,309	(d) 5,251
Japan ..	45,596	45,195	Irish Free State ..	4,158	7,837
Egypt ..	40,150	45,702	Colombia ..	3,404	(b) 3,755
Manchuria ..	36,782	30,677	Finland ..	3,325	5,442
Algeria ..	36,353	29,773	Palestine ..	2,838	2,796
Chile ..	32,441	(d) 31,927	Estonia ..	2,609	2,432

NOTE.—The harvests reported above for 1936 relate to the year 1935 for the Northern, and 1934 for the Southern Hemisphere.

(a) Average 1933-34. (b) Year 1935. (c) Year 1934. (d) Year 1935-36.

A complete statement of the world's production of wheat is not possible owing to the failure of certain countries to supply the necessary information. The International Institute of Agriculture, Rome, has, however, compiled figures obtained from the countries reporting with the following results :—

WHEAT.—WORLD'S PRODUCTION.(a)

Year.		Area.	Production.	Yield per acre.
		Acres.	Bushels.	Bushels.
Average 1909-1913	..	270,266,000	3,779,479,000	13.98
„ 1926-1930	..	325,406,090	4,590,390,000	14.11
1931	..	347,546,150	4,630,441,000	13.32
1932	..	346,285,940	4,599,944,000	13.28
1933	..	333,288,480	4,840,615,000	14.52
1934	..	330,619,800	4,620,153,000	13.97
1935	..	338,601,130	4,695,845,000	13.87
Average 1931-1935	..	339,268,300	4,677,399,600	13.79

(a) From countries reporting including the Soviet Union.

The chief countries excluded from the above table are China and Manchuria. For the year 1935 the former produced 783 million bushels of wheat from an area of 51.4 million acres or an average yield of 15.23 bushels per acre, while Manchuria produced 34.3 million bushels from 2.4 million acres or an average of 14.29 bushels per acre. It is stated by the International Institute, however, that these figures for China are largely conjectural and can be accepted only as approximate estimates. In addition they do not include all of the Territories embraced in the Chinese Republic. By the addition of the production of these two countries the world's total production for the year 1935 would exceed 5,513 million bushels.

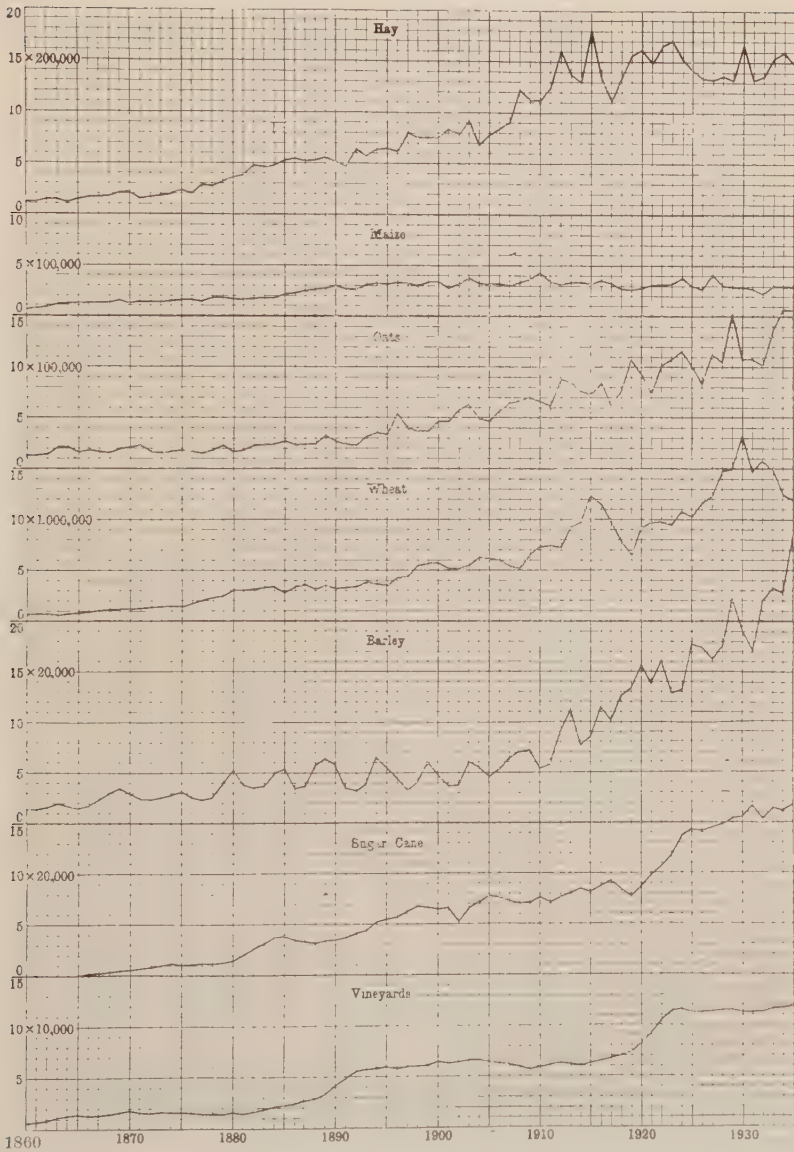
The total area harvested in 1935 increased by 8 million acres and was the first occasion since 1931 that an expansion has been recorded. The United States of America with 7.8 million acres and the Soviet Union with 4.4 million acres were chiefly responsible for this increase. With the exception of the Argentine Republic, where the area was reduced by 5.5 million acres, there was little change in the areas harvested in the other producing countries of the world. In comparison with the average for the period 1926-30, areas sown to wheat throughout the world have increased considerably, the Soviet Union and European countries being the chief contributors.

The world's acreage under wheat in 1931 was the highest ever recorded, but the production was somewhat lower than that for the record year of 1930 when the production amounted to 4,882 million bushels. A succession of bountiful years commencing in 1928 led to very heavy accumulations of stocks, particularly in North America. These stocks reached their maximum about the year 1932 but they have now been reduced to about normal dimensions owing to reductions in world production during the three years ending in 1936.

Australia's contribution to the world's wheat during the last five years was 4 per cent. as to area and 3.7 per cent. in regard to production.

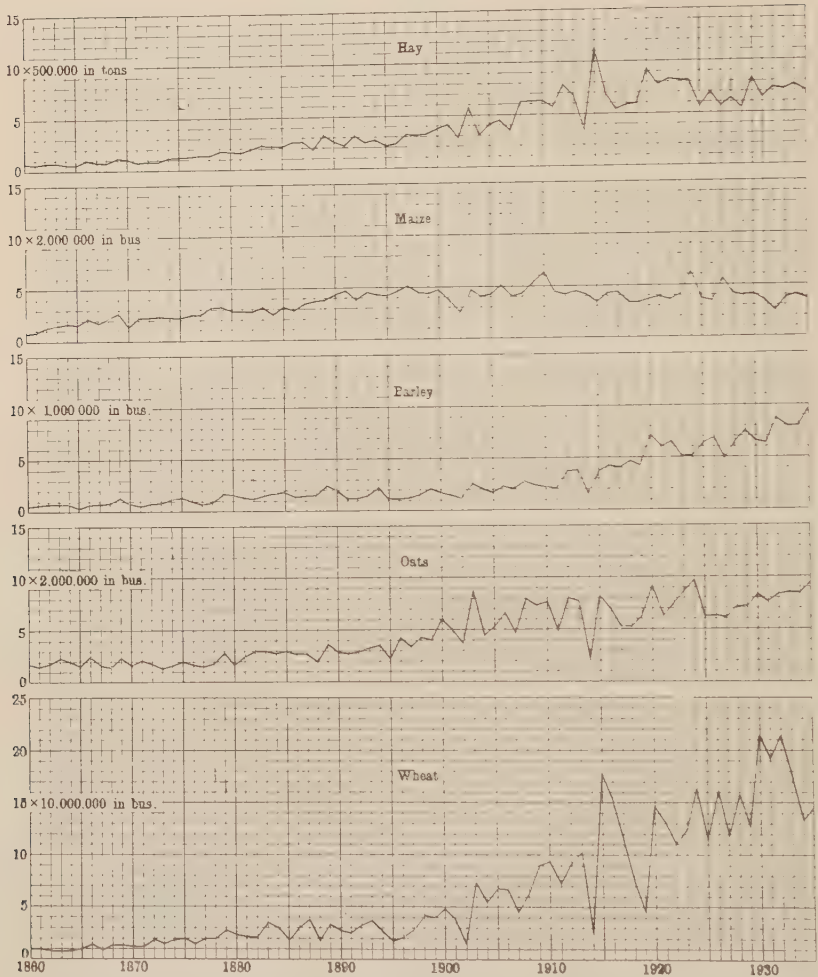
5. **Price of Wheat.**—The collapse in the price of wheat which occurred between 1928 and 1931 was chiefly due to the accumulation of stocks in exporting countries. Additional factors were the reduced import demand in European countries consequent upon increased production and the raising of trade barriers. The weighted average price of wheat (shippers' limits Sydney, Melbourne and Adelaide) fell from 5s. 1½d. in 1928 to 2s. 4½d. in 1931, a decline of 53 per cent. In 1932 the price increased to 3s. 0½d. but dropped to 2s. 0½d. in 1933 and to 2s. 7½d. in 1934. In September, 1935, prices increased to more than 3s. 4d. and fluctuated at about 3s. 6d. per bushel until August, 1936, when they again increased to more than 4s. 6d. In December, 1930, the average price was almost 5s. 3d. and from that month until August, 1937, the average has exceeded 5s.

AREA UNDER PRINCIPAL CROPS—AUSTRALIA, 1860 TO 1935-36.



EXPLANATION.—The base of each small square represents an interval of one year, while the vertical height represents a number of acres, varying with the nature of the crop in accordance with the scale given on the left of the graph. The height of each curve above its base line denotes, for the crop to which it relates, the total area under cultivation in Australia during the successive seasons.

PRODUCTION OF PRINCIPAL CROPS—AUSTRALIA, 1860 TO 1935-36.



EXPLANATION.—A separate base line is provided for each of the crops dealt with. In each instance the base of a small square represents an interval of one year, the vertical height of such square representing in the case of wheat, 10,000,000 bushels; oats, 2,000,000 bushels; barley, 1,000,000 bushels; maize, 2,000,000 bushels; and hay, 500,000 tons. The height of each curve above its base line denotes the aggregate yield in Australia of the particular crop during the successive seasons.

A succession of reduced yields in 1934, 1935 and 1936, which brought about the reduction of excess world stocks, was the chief factor in the hardening of prices. The table hereunder shows prices of Australian wheat during each of the last six years:—

PRICE OF WHEAT.—AUSTRALIA.

(WEIGHTED AVERAGE OF SHIPPERS' LIMITS FOR GROWERS' BAGGED LOTS, SYDNEY
MELBOURNE AND ADELAIDE.

Item.	1931.	1932.	1933.	1934.	1935.	1936.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Price per bushel	2 4 $\frac{3}{4}$	3 0 $\frac{1}{2}$	2 9 $\frac{3}{4}$	2 7 $\frac{1}{2}$	3 1 $\frac{3}{4}$	4 1 $\frac{3}{4}$

6. Exports of Wheat and Flour.—(i) *Quantities.* The table appended shows the exports and net exports of wheat and flour from 1932-33 to 1936-37. For the sake of convenience, flour has been expressed at its equivalent in wheat, 1 ton of flour being taken as equal to 48 bushels of grain. Wheat and flour have been imported on only two occasions since 1900 to tide over lean seasons; in 1902-3 the wheat harvest was as low as 12,378,000 bushels and wheat and flour representing 12,400,000 bushels of wheat were imported, whilst an equivalent of 7,279,000 bushels was imported in 1914-15 to supplement the yield of 25 million bushels produced in that season. During the last five years exports in terms of wheat ranged between 87,635,144 bushels in 1933-34 and 149,862,751 bushels in 1932-33, the net exports for the period averaging 110,700,000 bushels:—

WHEAT AND FLOUR.—EXPORTS, AUSTRALIA.

Year.	Exports.			Net Exports.
	Wheat.	Flour.	Total.	
	Bushels.	Eq. Bushels.(a)	Bushels.	Bushels.
1932-33 ..	119,555,938	30,310,032	149,865,970	149,862,751
1933-34 ..	61,598,528	26,039,616	87,638,144	87,635,144
1934-35 ..	75,959,690	33,502,608	109,462,298	109,457,913
1935-36 ..	76,993,133	29,619,888	106,613,021	106,610,518
1936-37 (b) ..	72,736,970	27,109,104	99,846,074	99,804,388

(a) Equivalent in bushels of wheat.

(b) Subject to revision.

(ii) *Destination.* The following table gives the exports of wheat to various countries for each of the five years ended 1935-36, together with averages for the pre-war period 1909-13:—

EXPORTS OF WHEAT.—AUSTRALIA.

Country to which Exported.	Average, 1909-13.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
United Kingdom ..	30,305,384	49,218,371	50,930,918	45,531,316	41,108,166	46,770,049
India ..	(a)	1,117,733	3,604,872	3,959,445	2,622,852	4,744,435
Irish Free State ..	(a)	1,117,733	3,604,872	3,959,445	2,622,852	4,744,435
Union of South Africa ..	2,092,333	1,611,017	1,617,000	1,617,000	1,617,000	1,617,000
Other British Countries ..	(a)	1,117,733	3,604,872	3,959,445	2,622,852	4,744,435
Belgium ..	1,218,131	1,891,978	826,517	37,180	253,920	242,838
China ..	(a)	30,990,771	33,740,244	1,476,012	13,663,804	5,052,790
Egypt ..	135,377	1,640,083	1,019,218	203,760	1,005,768	502
France ..	1,681,918	163,492	..	..	..	40,613
Germany ..	286,822	204,080	46,125	..	..	..
Italy ..	581,309	8,194,885	3,656,230	699,225	18,838	1,736,663
Japan ..	330,131	21,251,811	17,896,366	..	..	11,211,500
Other Foreign Countries	4,465,847	8,026,224	4,128,432	1,247,350	437,466	2,909,408
Total ..	41,997,274	127,401,005	119,555,938	61,598,528	75,959,690	76,993,133

(a) Included with "Other Foreign Countries."

Exports of flour from Australia for the periods mentioned are given in the next table:—

EXPORTS OF FLOUR.—AUSTRALIA.

Country to which Exported.	Average, 1909-13.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom	27,699	191,963	121,995	136,677	99,332	130,998
Ceylon	3,389	19,411	19,239	18,893	18,821	17,000
Hong Kong	2,672	53,557	50,874	27,663	50,616	44,382
Malaya (British)	15,192	43,604	43,995	50,834	61,926	55,502
Union of South Africa ..	30,714	1,230	228	436	371	545
Other British Countries ..	(a)	48,221	53,167	61,490	46,158	60,314
China	(a)	6,859	160,602	79,201	314	951
Egypt	(a)	106,526	28,589	27,766	26,864	23,722
Manchuria (b)	(a)	(c)	(c)	(c)	240,181	112,780
Netherlands East Indies ..	26,009	85,570	73,179	80,623	82,147	82,077
Philippine Islands	13,680	11,762	11,184	10,998	27,437	40,491
Other Foreign Countries ..	47,397	42,065	68,677	47,851	43,304	48,130
Total	167,112	610,858	631,459	542,492	697,971	617,081

(a) Included with "Other Foreign Countries."
(c) Included with China.

(b) Including Kwantung Peninsula.

7. Exports—Principal Countries.—The following table shows the net quantities of wheat exported from the chief exporting countries in recent years and during the pre-war period. In the years before the war the Soviet Union was the outstanding contributor to the world's supply of wheat followed by the United States of America but in recent years the net exports from both of these countries are relatively unimportant. Canada now occupies the foremost position with Argentine Republic and Australia coming next in order.

Although the local production of wheat is less than 4 per cent. of the world's total the exports from Australia represented more than 20 per cent. of the quantities shipped during 1931 to 1935, and as an exporting country Australia has made the greatest relative advance since 1913.

WHEAT.(a)—NET EXPORTS, PRINCIPAL COUNTRIES.

Country.	Average 1909-13.		1931.	1935.	Average 1931-35.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
Soviet Union (b) ..	157,109	23.71	8,671	26,711	34,879	5.44
United States of America ..	100,864	15.22	19,124	..	43,871	6.84
Argentine Republic ..	95,041	14.34	181,549	146,171	148,833	23.20
Canada	89,919	13.57	189,147	186,431	212,340	33.10
British India	50,886	7.68	1,928	1,532	1,151	0.18
Australia	49,417	7.46	93,299	100,419	128,703	20.06
All Other Countries ..	119,351	18.02	61,306	85,541	71,741	11.18
Total	662,587	100.00	555,024	546,805	641,518	100.00
World's Production ..	3,779,479		4,620,153	4,695,845	4,677,400	
Percentage of Australian Net Exports on Total Net Exports	7.46		16.81	18.36	20.06	
Percentage of Australian Production on World's Production ..	2.39		2.90	3.07	3.68	

(a) Including flour expressed in terms of wheat.

(b) The average for 1909-13 is not strictly comparable with the later years, owing to changes of frontiers under the Peace Treaty.

8. Imports—Principal Countries.—The quantities of wheat and flour (expressed in terms of wheat) imported into the principal countries for the periods indicated are shown in the following table. The United Kingdom is easily the leading importing country. The quantities imported into certain European countries, particularly Germany, Netherlands, Belgium and Italy are both relatively and actually much smaller now than formerly owing to the encouragement given to the local wheat-growing industries in those countries. During recent years the imports of wheat into China and Japan have grown considerably, and a large share in this trade has been supplied by Australia :—

WHEAT.(a)—IMPORTS, PRINCIPAL COUNTRIES.(b)

Country Importing.	Average, 1909-13.		1934.	1935.	Average, 1931-35.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
United Kingdom ..	219,365	30.42	215,079	208,819	225,248	30.83
Germany ..	89,732	12.44	23,894	5,972	25,220	3.45
Netherlands ..	76,340	10.59	20,057	21,495	26,852	3.68
Belgium ..	73,963	10.26	48,195	38,922	46,438	6.36
Italy ..	57,156	7.93	17,645	20,319	30,097	4.12
France ..	38,682	5.36	29,946	28,617	51,489	7.05
Brazil ..	20,774	2.88	34,589	34,623	32,740	4.48
Egypt ..	7,915	1.10	835	1,612	3,164	0.43
Union of South Africa ..	6,519	0.90	934	80	1,160	0.16
China (c) ..	5,526	0.77	45,628	44,443	58,835	8.05
Japan ..	3,714	0.52	18,100	16,777	21,884	3.00
All Other ..	121,409	16.83	179,310	207,073	207,433	28.39
Total ..	721,095	100.00	634,212	628,752	730,560	100.00

(a) Including flour expressed in terms of wheat. (b) In some instances the average 1909-13 is not strictly comparable with the other years shown, owing to changes of frontiers. (c) Including Manchurian ports.

9. Consumption of Wheat.—(i) Australia. The estimated consumption of wheat for food and the quantity used for seed in Australia during the last five years are shown hereunder :—

AVERAGE HUMAN CONSUMPTION, 1931-32 TO 1935-36.

Flour milled	1,298,887 tons
Less net exports of flour	619,915 tons
Less net exports of flour in biscuits	970 "
	620,885 "
Change in flour stocks	678,002 "
	21,011 "
Net quantity consumed	656,991 "
Equivalent in terms of wheat	31,535,600 bushels
Net quantity consumed per head of population—	
As flour	197 lb.
As wheat	4.800 bushels

AVERAGE USED FOR SEED, 1931-32 TO 1935-36.

Average area sown for grain, hay and green forage ..	14,935,817 acres
Average quantity of seed used	14,715,627 bushels
Average quantity of seed used per acre	59 lb.
Average quantity per head of population	2.212 bushels

In addition to the above, allowance must be made for wheat fed to poultry and other live stock. The quantity so used is estimated at 5,335,000 bushels or 0.82 bushels per head of population for the five years ended 1935-36. Almost the whole of this quantity is used in the form of grain as feed for poultry, principally fowls, which numbered about 15 million during the year 1933-34. The average quantity of flour consumed per annum for the five years under consideration was 107 lb. per head of population, which, expressed in terms of wheat, represents 4,800 bushels. The estimates of quantity of grain used for seed in Victoria, South Australia and Western Australia are based on data collected from growers. In the other States estimates supplied by the Agricultural Departments have been used. The average annual quantity used for the purposes indicated during the last five years was 2.212 bushels per head of population, or 59 lb. per acre sown. The consumption of wheat in Australia for all purposes during the period dealt with averaged, therefore, 51,610,000 bushels, or 7.75 bushels per head of population.

(ii) *Other Countries.* The following table gives the consumption of wheat in some of the principal countries of the world. The figures, which were obtained partly from the Food Research Institute of California, represent the *per capita* consumption of wheat exclusive of the quantity used for seed purposes:—

PER CAPITA CONSUMPTION OF WHEAT, EXCLUDING SEED, FOR PERIOD 1922-1929.

Country.		Used for human consumption.	Fed to Stock.	Total.
		Bushels.	Bushels.	Bushels.
Argentine Republic (a)	..	5.4	0.2	5.6
Australia (a) ..	..	4.8	0.8	5.6
Canada ..	..	4.5	3.3	7.8
New Zealand (b)	..	4.1	1.1	5.2
United Kingdom ..	..	4.8	1.0	5.8
United States ..	..	4.2	0.6	4.8

(a) Average for five years ended 1935-36.

(b) Average for five years ended 1935.

10. *Value of the Wheat Crop.*—The estimated value of the wheat crop in each State and in Australia during the season 1935-36 is shown below. The values shown are inclusive of financial assistance granted by the Commonwealth Government which amounted to £1,880,526 during the year. Particulars for this and previous years are shown in § 18 Bounties below.

WHEAT.—VALUE OF CROP(a), 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
Aggregate value..	£ 9,408,410	£ 8,108,827	£ 597,039	£ 6,567,600	£ 5,033,176	£ 46,300	£ 6,921	£ 29,768,293
Value per acre ..	£ 2/8/10	£ 3/9/9	£ 2/9/10	£ 2/3/11	£ 1/19/7	£ 4/9/0	£ 4/5/6	£ 2/9/10

(a) Gross value of total crop, including seed used on farm, valued at metropolitan prices but exclusive of value of straw.

11. *Varieties of Wheat Sown.*—Particulars of the varieties of wheat sown and the areas thereunder are collected from time to time. The following table shows particulars of the nine principal varieties sown in the four main producing States and the percentage each bears to the total area sown for the year 1935-36.

PRINCIPAL VARIETIES OF WHEAT SOWN—STATES, 1935-36.

New South Wales.		Victoria.		South Australia.		Western Australia.	
Variety.	Per-cent- age.	Variety.	Per-cent- age.	Variety.	Per-cent- age.	Variety.	Per-cent- age.
Nabawa ..	24.7	Ghurka ..	34.9	Ranee ..	18.1	Bencubbin ..	30.7
Ford ..	18.9	Free Gallipoli ..	24.9	Nabawa ..	17.6	Glueclub ..	11.0
Waratah ..	8.2	Ranee ..	22.1	Sword ..	11.2	Morredin ..	10.4
Dundee ..	6.9	Sepey ..	4.3	Waratah ..	6.9	Gluyas Early ..	9.2
Bobin ..	5.4	Nabawa ..	2.3	Gluyas ..	6.0	Nabawa ..	8.4
Ranee ..	4.2	Rajah ..	1.6	Ford ..	5.5	Noongaar ..	4.8
Yandilla King ..	3.7	Major ..	1.2	Gallipoli ..	4.4	Totadgin ..	4.4
Baringa ..	3.5	Federation ..	1.0	Ghurka ..	3.8	Waratah ..	3.6
Free Gallipoli ..	2.7	Nizam ..	0.8	Late Gluyas ..	2.7	Ford ..	2.1
All Others ..	21.8	All Others ..	6.9	All Others ..	23.8	All Others ..	15.4
Total ..	100.0	Total ..	100.0	Total ..	100.0	Total ..	100.0

It is interesting to note the changes that have taken place in the leading varieties during recent years. In New South Wales and South Australia Nabawa occupied a very minor place on the list in 1929, but by 1933 it had risen to the leading position which it still retains in New South Wales. On the other hand this variety, while still prominently grown in Western Australia, declined from 47 per cent. of the total area in 1929 to 8 per cent. in 1935 in which year it receded to fifth place. Ranee was the leading variety sown in South Australia in 1935, supplanting Nabawa which now occupies second position. Free Gallipoli was the leading variety sown in Victoria between the years 1929 and 1934. In 1935, however, this variety was supplanted by Ghurka which occupied nearly 35 per cent. of the total area sown in that State. More than 1,000 different varieties of Australian wheat have been catalogued by the Council for Scientific and Industrial Research.

12. **Stocks of Wheat and Flour.**—Stocks of wheat and flour held by each State at 30th November, 1936, and the total held in Australia on the same date for the previous four years will be found in the following table. The figures have been compiled from information collected from millers, merchants, the Railway Departments and other sources, but are exclusive in certain instances of stocks held by farmers:—

STOCKS OF WHEAT AND FLOUR.—AUSTRALIA, 30TH NOVEMBER, 1936.

State.		Wheat.	Flour.	Total in terms of wheat.(a)
		Bushels.	Tons.	Bushels.
New South Wales	.. ..	1,070,439	34,351	2,719,287
Victoria	.. ..	1,060,427	38,031	2,885,915
Queensland	.. ..	305,961	5,655	577,401
South Australia	.. ..	502,093	10,166	990,061
Western Australia	.. ..	372,970	11,050	903,370
Tasmania	.. ..	106,503	1,810	193,383
Total, 30th November, 1936	.. ..	3,418,393	101,063	8,269,417
" " 1935	.. ..	12,371,270	89,637	16,673,867
" " 1934	.. ..	34,708,963	112,385	40,103,463
" " 1933	.. ..	14,375,614	86,638	18,534,212
" " 1932	.. ..	6,647,325	85,658	10,758,925

(a) One ton of flour treated as equivalent to 48 bushels of wheat.

13. **Voluntary Wheat Pools.**—(i) *General.* Voluntary wheat pools operated in the States of Victoria, South Australia and Western Australia during the season 1936-37. In New South Wales the pool was inactive during the year. The system adopted in these States is somewhat similar, and is a co-operative one controlled by trustees, or committees appointed by the growers, the whole of the proceeds, less administrative

expenses, being distributed amongst contributors of wheat to the pool. The trading names of these organizations in the various States are as follows:—

New South Wales.—The Wheat Growers' Pooling and Marketing Co. Ltd.

Victoria.—Victorian Wheat-growers' Corporation Ltd.

South Australia.—South Australian Co-operative Wheat Pools Ltd.

Western Australia.—The Trustees of the Wheat Pool of Western Australia.

The marketing of wheat in Queensland is conducted on a compulsory basis by the State Wheat Board, consisting of four elected representatives and one member nominated by the Minister for Agriculture who represents the Queensland Government. The present Board was elected on 1st August, 1935, and holds office for three years from that date.

(ii) *Delivery of Wheat to Pools, Costs, etc.* The quantities of wheat received and the estimated average costs per bushel of rail freight and of administrative and other expenses are given hereunder. As the season's operations are not yet complete, the costs shown are subject to revision.

WHEAT RECEIVED BY VOLUNTARY POOLS, 1936-37.

Particulars.	Unit.	Victoria.	Queensland. (a)	South Australia.	Western Australia.
Wheat received	Bushel	(c)	2,037,945	375,227	2,732,000
Percentage on Total Market- able Wheat	%	(c)	87	1½	16
Estimated average cost of rail freight to seaboard, per bushel	d.	4½	4½	3½	4½
Estimated average cost per bushel of Administration and other expenses ..	d.	(c)	(b) 3½	5	3½

(a) Compulsory Pool.

(b) Approximate.

(c) Not available.

(iii) *Finance.* The requisite financial accommodation in Victoria and South Australia was furnished by the Commonwealth Bank. In Western Australia funds were made available by financial houses in London. Initial advances made available to growers on the delivery of their wheat at country stations are shown, together with subsequent payments, in the following table:—

WHEAT POOLS ADVANCES^(a) PER BUSHEL MADE TO SEPTEMBER, 1937.

Particulars.	Victoria.	South Australia.	Western Australia.
	s. d.	s. d.	s. d.
1st Payment	3 3	3 6	3 6
2nd Payment	(c)	0 4½	1 0
3rd Payment		1 0	0 5
4th Payment		0 1½	(b) 0 5½
Estimated Final Payment ..		..	..

(a) Less Rail Freight.

(b) Bulk wheat, 5½d. for bagged wheat.

(c) Not available.

In Queensland the Commonwealth Bank provides the financial assistance necessary to make advances on wheat delivered, the State Government guaranteeing the Wheat Board's accounts with the bank. All wheat not required for consumption on the farm is delivered to the Board, which is the sole marketing agency. The crop in 1936-37 amounted to 2,340,980 bushels, of which 2,037,945 bushels, or 87 per cent., was delivered into the pool. Net advances made to growers on No. 1 quality wheat totalled 5s. od. per bushel; other grades bear the dockages ranging from ¼d. to 5d. per bushel assessed at the time of delivery according to quality. The dockages being a deduction from the first advance, subsequent advances are uniform on all grades.

14. *Special Tabulation of Wheat Holdings.*—(i) *General.* With the co-operation of the State Statisticians an extensive analysis was made of the returns collected at the annual agricultural census of 1935-36 in respect of all holdings growing wheat for grain in the principal producing States. The results are published in the following tables which should be read in conjunction with the seasonal conditions under which the crop was grown (see page 682).

(ii) *Wheat Holdings, Number, Area and Production.* The areas of the holdings growing wheat for grain are shown in the following table together with the production of wheat thereon:—

WHEAT HOLDINGS—NUMBER, AREA AND PRODUCTION 1935-36.

State.	Holdings.				Wheat.		
	Growing Wheat for Grain.	Total Area.	Average Area.	Area Sown.	Average Area Sown.	Production.	Average Production per Holding.
	No.	Acres.	Acres.	Acres.	Acres.	Bushels.	Bushels.
New South Wales ..	15,923	24,370,178	1,531	3,851,373	242	18,822,000	3,006
Victoria ..	13,780	12,482,336	906	2,323,753	160	37,532,062	2,725
South Australia ..	12,787	17,896,496	1,400	2,989,490	234	31,615,744	2,472
Western Australia ..	9,039	19,339,951	2,140	2,540,096	281	23,315,417	2,579
Total (Four States)	51,529	74,007,961	1,438	11,705,312	227	141,305,223	2,742

(iii) *Wheat Holdings and Sheep.* One of the objects of the analysis was to ascertain the extent to which certain other forms of farm production were combined with the growing of wheat. It will be seen from the table below that 75 per cent. of the wheat holdings carried sheep, the numbers depastured forming a considerable proportion of the sheep populations of the individual States.

WHEAT HOLDINGS AND SHEEP, 1935-36.

State.	Holdings.				Number of Sheep.	Total Number of Sheep in State. (a)	Percentage on Wheat Farms.
	Without Sheep.		With Sheep.				
	No.	%	No.	%			
New South Wales ..	2,206	14.42	13,027	85.58	13,393,541	51,936,000	25.78
Victoria ..	3,806	27.62	9,971	71.38	4,841,152	17,457,291	27.73
South Australia ..	4,115	32.18	8,672	67.82	3,750,861	7,945,715	37.21
Western Australia ..	2,295	25.39	6,744	74.61	4,482,667	11,082,972	40.45
Total (Four States) ..	12,512	24.28	39,017	75.72	26,168,224	88,422,008	29.93

(a) Including Sheep outside Wheat Areas.

(iv) *Wheat Holdings and Dairy Cows.* In addition to sheep, the great majority of holdings also carried dairy cows. As indicated in the footnote to the table the particulars available for New South Wales refer only to those holdings which are registered as dairies and therefore an effective comparison cannot be made for the four States.

WHEAT HOLDINGS AND DAIRY COWS, 1935-36.

State.	Holdings.				Number of Dairy Cows.	Total		Percentage on Wheat Farms.
	Without Dairy Cows.		With Dairy Cows.			Number of Dairy Cows in State. (b)		
	No. (a)	%	No. (a)	%	No. (a)	No. (1,091,502)	% (a)	
New South Wales ..	1,993	14.46	11,787	85.54	109,049	987,976	11.00	
Victoria ..	1,080	15.48	10,807	84.52	79,159	173,706	45.57	
South Australia ..	1,791	19.01	7,248	80.19	32,243	130,132	24.78	
Western Australia ..								
Total (Three States)	5,764	16.19	29,842	83.81	220,451	1,291,514	17.07	

(a) The particulars available for New South Wales refer to registered dairies only. These details show that of the 15,923 holdings growing wheat for grain, 1,775 were also registered as dairies and the number of dairy cows carried was 51,344.

(b) Including dairy cows outside wheat areas.

(v) *Wheat Holdings and Pigs.* The extent to which pig raising is conducted in conjunction with the growing of wheat for grain is indicated in the next table :—

WHEAT HOLDINGS AND PIGS, 1935-36.

WHEAT HOLDINGS AND PIGS, 1900-1901.

State.	Holdings.				Number of Pigs.	Total Number of Pigs in State. (a)	Percentage on Wheat Farms.
	Without Pigs.		With Pigs.				
	No.	%	No.	%			
New South Wales ..	10,462	65.70	5,461	34.30	59,673	436,944	13.66
Victoria ..	8,298	60.22	5,482	39.78	41,100	314,301	13.08
South Australia ..	5,425	42.43	7,362	57.57	58,628	93,458	62.73
Western Australia ..	5,318	58.83	3,721	41.17	62,079	98,026	63.33
Total (Four States)	29,503	57.26	22,026	42.74	221,480	942,729	23.49

(a) Including Pigs outside Wheat Areas.

(vi) *Wheat Holdings. Area sown and Yield per Acre.* The holdings growing wheat for grain were classified for each of the principal producing States according to areas sown and yields per acre. It is possible to show only the totals for the four States combined in the Year Book. Details for the States are published in *Production Bulletin* No. 30 issued by this Bureau. The classification according to areas sown is as follows :—

WHEAT HOLDINGS CLASSIFIED ACCORDING TO AREAS SOWN. (PRINCIPAL PRODUCING STATES.)

Area under Wheat for Grain.		Holdings.		Area under Grain.		Production.	
Acres.		No.	%	'000 Acres.	%	'000 Bushels.	%
1-19 ..	..	3,843	7.5	36	0.3	517	0.4
20-49 ..	..	4,167	8.1	132	1.1	1,908	1.4
50-99 ..	..	5,521	10.7	390	3.3	5,894	4.2
1-99 ..	..	13,531	26.3	558	4.7	8,319	6.0
100-199 ..	..	11,979	23.2	1,712	14.6	25,320	17.9
200-299 ..	..	11,064	21.5	2,623	22.4	33,967	24.0
300-399 ..	..	7,160	13.9	2,373	20.3	26,808	19.0
400-499 ..	..	3,691	7.2	1,594	13.6	16,668	11.8
100-499 ..	..	33,894	65.8	8,302	70.9	102,763	72.7
500-599 ..	..	1,805	3.5	955	8.2	10,124	7.2
600-699 ..	..	946	1.8	594	5.1	6,105	4.3
700-799 ..	..	489	0.9	357	3.1	3,864	2.7
800-899 ..	..	284	0.6	236	2.0	2,582	1.8
900-999 ..	..	188	0.4	175	1.5	1,865	1.3
1,000-1,999 ..	..	308	0.7	483	4.0	4,710	3.3
2,000 and over ..	..	24	..	75	0.6	967	0.7
500 and over ..	..	4,104	7.9	2,845	24.4	30,223	21.3
Total ..	..	51,529	100.0	11,705	100.0	141,305	100.0

Wheat is grown in the principal producing States on an extensive scale; more than 76 per cent. of the production in 1935-36 was sown on areas of 200 acres or more. Although 13,531 holdings grew wheat on small areas of under 100 acres the yield therefrom was only 6 per cent. of the total. At the other end of the scale less than 10 per cent. was reaped from the very large areas of 700 acres or over. The average area sown was 227 acres.

In the next table the classification according to average yields is shown :—

WHEAT HOLDINGS CLASSIFIED ACCORDING TO AVERAGE YIELDS.

PRINCIPAL PRODUCING STATES.

Average Yield per Acre.			Holdings.		Area under Grain.		Production.	
Bushels.			No.	%	'000 Acres.	%	'000 Bushels.	%
Under 3	..	..	5,404	10.5	1,445	12.3	1,998	1.4
3 and under 6	..	..	5,817	11.3	1,585	13.5	7,132	5.1
6	..	9	6,672	12.9	1,751	15.0	13,085	9.3
9	..	12	6,830	13.3	1,659	14.2	17,283	12.2
12	..	15	6,180	12.0	1,405	12.0	18,828	13.3
15	..	18	5,885	11.4	1,170	10.0	19,195	13.6
18	..	21	4,929	9.6	906	7.7	17,629	12.5
21	..	24	3,628	7.0	684	5.8	15,365	10.9
24	..	27	2,994	5.8	544	4.7	13,852	9.8
27	..	30	1,551	3.0	298	2.6	8,471	6.0
30	..	33	1,109	2.2	182	1.6	5,700	4.0
33	..	36	290	0.6	46	0.4	1,593	1.1
36	..	39	172	0.3	23	0.2	867	0.6
39	..	42	36	0.1	4	..	144	0.1
42	..	45	13	..	2	..	79	0.1
45	..	48	15	..	1	..	59	..
48	..	54	4	..	..	..	25	..
Total	..	..	51,529	100.0	11,705	100.0	141,305	100.0

The most significant feature of the above tabulation is the very low returns obtained from considerable areas sown; more than 3 million acres, or one-quarter of the total sowings, yielded less than 6 bushels to the acre and practically one-half of this acreage returned yields of under 3 bushels. On the other hand the productivity of vast tracts of wheat country is indicated by the yields of 15 bushels or more over an area of 3.9 million acres, whilst nearly 1 million acres returned 25 bushels or over to the acre.

§ 5. Oats.

1. Progress of Cultivation.—(i) *Area and Production.* Oats are usually next in importance to wheat amongst the grain crops cultivated in Australia, but while wheat grown for grain accounted for 59.86 per cent., oats represented only 7.83 per cent. of the area under crop in 1935-36. The acreage and production of oats for the last five years are shown in the table hereunder, and more fully in the graphs on pages 687 and 688.

OATS.—AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32..	151,600	439,626	1,364	205,470	267,894	18,412	123	1,085,489
1932-33..	163,809	368,846	3,733	174,244	285,850	30,652	128	1,027,262
1933-34..	203,693	525,976	5,207	265,074	342,642	31,199	130	1,373,921
1934-35..	237,405	506,638	4,566	367,192	408,810	36,611	331	1,561,553
1935-36..	279,622	505,623	6,823	299,771	448,156	23,928	248	1,564,171
Average 10 seasons, 1927-36	174,032	452,780	3,223	236,556	320,948	34,470	237	1,222,246
PRODUCTION.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32..	2,526,450	6,450,281	20,352	2,287,844	3,549,636	356,847	3,270	15,194,680
1932-33..	3,513,730	6,303,853	58,729	1,783,712	3,603,147	828,239	2,898	10,154,628
1933-34..	3,178,470	6,778,754	69,534	2,087,772	3,949,905	854,239	3,357	16,922,031
1934-35..	3,856,680	5,248,787	82,198	2,412,117	4,244,322	1,054,256	7,662	16,906,022
1935-36..	4,735,740	6,365,056	119,459	2,380,908	4,557,774	556,776	5,061	18,720,774
Average 10 seasons, 1927-36	2,931,000	5,832,821	51,711	1,913,171	3,641,071	661,636	3,766	15,371,053

The oat crop showed considerable variation during the past decennium, ranging from 12,084,265 bushels in 1927-28 to 18,720,774 bushels in 1935-36, with an average for the period of 15,374,953 bushels. The demand for the grain for oatmeal varies from 1½ million bushels to 2 million bushels annually. The cereal is mainly used as feed grain, and its value, particularly in good seasons, does not warrant an extension of area.

The principal oat-growing State is Victoria, which produces on the average about one-third of the total quantity grown in Australia. South Australia, Western Australia and Tasmania also produce considerable quantities in excess of local requirements. Western Australia disposes of its surplus to the East, principally to Malaya (British), whilst the other States export chiefly to New South Wales and Queensland. For Australia as a whole the record yield of oats was obtained during 1924-25, when 19,393,737 bushels were harvested.

(ii) *Average Yield.* The average yield per acre of oats varies considerably in the different States, being highest in Tasmania and lowest in South Australia. Averages for each of the last five seasons, and for the decennium 1927 to 1936 are given in the table below :—

OATS.—AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32	16.67	14.67	14.92	11.08	13.25	19.38	26.59	14.00
1932-33	21.45	17.25	15.73	10.27	12.61	27.02	22.41	15.73
1933-34	15.60	12.89	13.35	7.88	11.53	27.38	25.82	12.32
1934-35	16.25	10.36	18.00	6.57	10.38	28.80	23.14	10.83
1935-36	16.94	12.59	17.50	7.94	10.17	23.27	20.41	11.97
Average for 10 seasons 1927-36	16.84	12.88	16.83	8.22	11.36	27.99	15.91	12.58

The smallest average yield per acre ever recorded for Australia was that experienced in the abnormally dry season 1914-15, viz., 5.00 bushels, while the largest in the last ten years was that of the season 1924-25, amounting to 16.65 bushels per acre.

2. *World's Production.*—The world's production of oats for the year 1935, as computed by the International Institute of Agriculture, amounted to 3,719 million bushels. This quantity was harvested from 140 million acres, and represents an average yield of 25.43 bushels per acre. In comparison with this average return per acre, that of Australia for the same period (11.97 bushels) appears very small. Yields in excess of 40 bushels per acre are not uncommon, whilst in Belgium and the Irish Free State the average exceeded 50 bushels per acre during 1935. The following table shows the world's production and average yield for the last five years, together with the average for the quinquennium 1926-1930 :—

OATS.—WORLD'S PRODUCTION.

Year.	Area.	Production.	Average Yield per Acre.
	Million Acres.	Million Bushels.	Bushels.
Average 1926-30	147	3,728	25.43
1931	146	3,260	22.30
1932	142	3,556	25.20
1933	139	3,365	24.09
1934	136	3,210	23.64
1935	146	3,719	25.43

3. **Prices of Oats.**—The average wholesale prices in the Metropolitan markets for the year 1935-36 are given in the following table :—

OATS.—AVERAGE WHOLESALE PRICES, 1935-36.

Particulars.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
Average price per bushel ..	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
	2 4	2 2	3 7½	1 10½	2 5	2 4½

4. **Imports and Exports.**—The production of oats in Australia has not yet reached sufficient proportions to admit of a regular export trade. During the year 1927-28 there was a net import of 460,581 bushels. The quantities and values of oats imported into and exported from Australia during the years 1931-32 to 1935-36 are given hereunder :—

OATS.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Bushels.	£	Bushels.	£	Bushels.	£
1931-32(a) ..	5,470	1,435	245,700	30,394	240,230	28,959
1932-33(a) ..	4,443	981	245,178	26,311	240,735	25,330
1933-34(a) ..	3,542	772	87,275	12,789	83,733	12,017
1934-35(a) ..	7,302	1,728	576,062	61,581	568,760	59,853
1935-36(a) ..	3,790	1,065	244,698	28,783	240,908	27,718

(a) Australian currency values.

The quantity of oats imported into Australia is not very great and is obtained chiefly from New Zealand, while the principal countries to which oats were exported during the years quoted were New Zealand, Malaya (British), Ceylon, India and Mauritius. During 1934-35 and 1935-36 the United Kingdom has taken 457,000 and 107,000 bushels respectively.

5. **Oatmeal, etc.**—The production of oatmeal in Australia during 1935-36 amounted to 312,102 cwt., practically the whole of which is consumed locally, the quantity of oats used for oatmeal being 1,717,674 bushels, or about 9 per cent. of the total production. Oversea trade in this and similar products is small; the imports of oatmeal, wheatmeal and rolled oats during 1935-36 amounted to 881 cwt., and exports to 21,136 cwt.

6. **Value of Oat Crop.**—The estimated value of the oat crop for the season 1935-36 was as follows :—

OATS.—VALUE OF CROP,(a) 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	£	£	£	£	£	£	£	£
Aggregate value	532,770	702,808	20,900	252,661	561,803	64,900	569	2,116,411
Value per acre	£1 12 1/2	£1 12 1/2	£2 2 1/2	£2 16 1/2	£1 16 1/2	£2 11 1/2	£2 11 1/2	£1 12 1/2

(a) Exclusive of the value of straw.

§ 6. Maize.

1. **States Growing Maize.**—Maize is grown for grain chiefly in New South Wales and Queensland, the area so cropped in these States during the season 1935-36 being 277,219 acres, or 93 per cent. of the total for Australia. Of the balance, Victoria contributed 20,377 acres, South Australia 3 acres and the Federal Capital Territory 17 acres. The climate of Tasmania is unsuitable for the growing of maize for grain. In the States mentioned the crop is grown to a greater or less extent for green forage, particularly in connexion with the dairying industry.

2. Progress of Cultivation.—(i) *Area and Production.* Notwithstanding its pre-eminence as the world's most extensively grown cereal, the cultivation of maize has decreased in Australia during the past decennium. Compared with the previous year, the area in 1935-36 increased by 2,000 acres but it is about 1,000 acres below the average for the decennium 1927-36 which amounted to 299,000 acres. The greatest area grown was in 1910-11 when it amounted to 414,914 acres.

The area and production of maize for grain in each State for the last five years and the average for the decennium 1927-36 are given in the following table. The fluctuations from year to year are shown more fully on the graphs on pages 687 and 688 :—

MAIZE.—AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Nor. Ter.	Fed. Cap. Ter.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32..	106,047	15,714	147,669	7	11	..	..	269,448
1932-33..	113,333	16,425	98,487	5	8	..	2	228,260
1933-34..	117,231	19,538	166,948	18	14	..	12	303,761
1934-35..	115,570	18,727	160,607	30	34	..	13	294,981
1935-36..	119,849	20,377	157,370	3	..	..	17	297,616
Average 10 seasons 1927-36 ..	116,942	17,842	163,860	6	26	5	7	298,688

PRODUCTION.

	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32..	2,669,580	611,902	3,780,597	217	87	..	..	7,062,383
1932-33..	2,935,140	477,145	1,653,853	135	42	..	6	5,066,321
1933-34..	3,133,890	644,033	3,715,764	150	183	..	60	7,494,080
1934-35..	3,238,590	719,360	4,142,079	450	216	..	132	8,100,827
1935-36..	3,324,780	638,643	3,504,045	108	..	..	129	7,467,705
Average 10 seasons 1927-36 ..	3,116,694	644,070	4,023,662	116	322	..	66	7,784,930

The greatest production of maize in Australia was recorded in 1910-11, when it amounted to over 13,000,000 bushels. This figure was considerably in excess of the yields for recent years, except in 1924, when a beautiful harvest in Queensland increased the Australian total to 12,400,000 bushels. The production in 1935-36 amounted to 7,467,705 bushels, and the average for the last decennium was 7,784,930 bushels.

(ii) *Average Yield.* The following table gives particulars of the average yield per acre of the maize crops of the States for the seasons 1931-32 to 1935-36 and for the decennium 1927-1936 :—

MAIZE.—AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	N. Ter.	Fed. Cap. Ter.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32 ..	25.17	38.94	25.00	31.00	7.01	..	..	20.21
1932-33 ..	25.90	29.05	16.79	27.00	5.25	..	3.00	22.20
1933-34 ..	26.73	32.96	22.26	8.33	13.07	..	5.00	24.67
1934-35 ..	28.02	38.41	25.79	15.00	0.35	..	10.15	27.40
1935-36 ..	27.74	31.34	22.27	36.00	..	..	7.59	25.09
Average for 10 seasons 1927-36	26.65	36.10	24.56	17.83	12.60	..	9.00	26.06

The average for Victoria is generally amongst the highest in the world. The area, however, is comparatively small and is situated in specially favourable districts. The average for New South Wales is generally higher than for Queensland.

(iii) *Production per Acre—Various Countries.* The average for Australia for the past 10 years was 26.1 bushels per acre. During the period 1926-30 the United States of America averaged 25.0 bushels, Argentine Republic 32.6 bushels, Rumania 16.7 bushels, and the Soviet Union 14.2 bushels per acre.

3. *World's Production.*—The following table furnishes particulars of the world's acreage, production and average yield per acre of maize according to the data compiled by the International Institute of Agriculture :—

MAIZE.—WORLD'S PRODUCTION.

Year.					Area.	Production.	Average Yield per Acre.
					Million Acres.	Million Bushels.	Bushels.
Average 1926-30					197	4,331	21.99
1931					211	4,590	21.83
1932					217	4,925	22.78
1933					213	4,334	20.39
1934					203	3,697	18.16
1935					203	4,283	21.03

The United States is the most important maize-producing country in the world. Approximately 100,000,000 acres are planted there annually, and in normal seasons more than 2,000 million bushels are reaped, representing about 50 per cent. of the world's production. About 85 per cent. of the total is fed to live stock on farms, 10 per cent. is used for human food, and only a very small fraction—less than one per cent.—is exported.

4. *Price of Maize.*—The average wholesale price of maize in the Sydney market for each of the last five years is given in the following table :—

MAIZE.—AVERAGE PRICE, SYDNEY.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	s. d.	s. d.	s. d.	s. d.	s. d.
Average price per bushel ..	3 9	4 11	3 6½	3 5	4 10½

5. *Overseas Imports and Exports.* The imports of maize into Australia during the five years ended 1934-35 were negligible, averaging less than 2,000 bushels compared with nearly 600,000 bushels during the five years ended 1929-30. In 1935-36 there was a comparatively large import into New South Wales from South Africa. Details of imports and exports for the years 1931-32 to 1935-36 are as follows :—

MAIZE.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Bushels.	£	Bushels.	£	Bushels.	£
1931-32(a) ..	229	307	2,586	554	— 2,357	— 247
1932-33(a) ..	5,064	878	1,370	377	— 3,694	— 501
1933-34(a) ..	23	26	3,120	731	— 3,097	— 705
1934-35(a) ..	7	16	3,430	851	— 3,423	— 835
1935-36(a) ..	47,609	12,233	527	129	47,082	12,104

NOTE.—The minus sign (—) denotes net exports.

(a) Australian currency values.

South Australia and Victoria were the only States producing more than 1,000,000 bushels on the average during the past decade, the yields being respectively 4,890,665 and 1,826,045 bushels, the higher return per acre in the latter State tending to diminish the advantage held by South Australia in regard to acreage.

(ii) *Malting and Other Barley.* (a) Year 1935-36. Particulars for the season 1935-36 are as follows:—

BARLEY, MALTING AND OTHER.—AREA AND PRODUCTION, 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Malting Barley..	7,066	98,799	4,285	348,512	22,287	4,921	485,870
Other Barley ..	4,517	17,572	2,095	45,229	9,281	306	79,000
Total ..	11,583	116,371	6,380	393,741	31,568	5,227	564,870
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Malting barley..	138,180	1,944,237	64,891	5,869,048	310,737	85,019	8,412,712
Other barley ..	76,680	370,190	26,475	624,335	106,890	7,695	1,212,265
Total ..	214,860	2,314,427	91,366	6,493,983	417,627	92,714	9,624,977

Taking Australia as a whole, about 86 per cent. of the area under barley in 1935-36 was sown with malting or English barley while the remainder consisted of Cape and other varieties. The proportion, however, varied largely in the several States. The disposal of barley during the season 1935-36 was as follows: malt works, 2,713,902 bushels; distilleries, 82,479 bushels; exports, 3,472,084 bushels; leaving a balance of approximately 3,356,512 bushels for feed, pearling and seed.

(b) *Progress of Cultivation.* The following table sets out the acreage and production of malting and other barley in Australia during the last five seasons:—

BARLEY, MALTING AND OTHER.—AREA AND PRODUCTION, AUSTRALIA.

Season.	Acres.			Bushels.			Average Yield per Acre.		
	Malting.	Other.	Total.	Malting.	Other.	Total.	Malting.	Other.	Total.
1931-32 ..	299,074	43,322	342,396	5,547,141	743,531	6,290,672	18.55	17.16	18.37
1932-33 ..	399,731	43,102	442,833	7,837,111	832,966	8,670,077	19.60	19.33	19.58
1933-34 ..	410,478	54,451	464,929	7,043,760	945,249	7,989,018	17.09	17.35	17.12
1934-35 ..	395,243	60,678	455,921	6,999,750	1,041,999	8,041,749	17.09	17.17	17.02
1935-36 ..	485,870	79,000	564,870	8,412,712	1,212,265	9,624,977	17.31	15.35	17.04
Average 10 seasons									
1927-36..	361,179	54,122	415,301	6,351,908	981,620	7,333,528	17.59	18.14	17.66

During the past ten seasons the area and production of malting barley have represented about six times the corresponding figures for other barley. The average yield per acre differs very little in respect of the two classes, the results for the last ten-yearly period being slightly in favour of the Cape variety.

(iii) *Average Yield.* The average yield of barley per acre varies considerably in the different States, being as a rule highest in Tasmania and Victoria, and lowest in Western Australia. Details for each State during the last five seasons, and for the decennium 1927-36, are given in the following table:—

BARLEY.—YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1931-32	16.40	18.93	16.37	18.87	11.32	14.29	18.37
1932-33	19.98	21.33	21.09	19.31	9.82	24.62	19.58
1933-34	16.50	17.76	17.40	17.09	13.34	21.97	17.12
1934-35	17.83	18.37	16.31	17.94	8.94	30.37	17.62
1935-36	18.55	19.89	14.32	16.49	13.23	17.74	17.04
Average for 10 seasons 1927-36	16.78	20.37	17.95	17.13	11.30	23.28	17.66

2. *Comparison with Other Countries.*—In comparison with the barley production of other countries, that of Australia appears extremely small. Particulars for some of the leading countries during 1935 are as follows:—Soviet Union, 360 million bushels; China, 348 million bushels; United States, 274 million bushels; Germany, 149 million bushels; India, 112 million bushels; and Canada, 81 million bushels.

3. *World's Production.*—The following table shows the world's acreage under barley, the production and average yield per acre, according to the results compiled by the International Institute of Agriculture:—

BARLEY.—WORLD'S PRODUCTION.

Period.	Area.	Production.	Average Yield per Acre.
	Million Acres.	Million Bushels.	Bushels.
Average 1926-30	89.6	1,779	19.81
1931	88.9	1,616	18.20
1932	90.4	1,797	19.81
1933	87.3	1,774	20.34
1934	88.2	1,678	19.09
1935	95.1	1,861	19.63

4. *Prices.*—The average prices in the Melbourne market during each of the last five years are given in the following table:—

BARLEY.—AVERAGE MELBOURNE PRICES PER BUSHEL.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	s. d.	s. d.	s. d.	s. d.	s. d.
Malting barley	2 11½	2 9	2 8	2 11	2 10½
Cape barley	2 3	2 4	2 3½	2 5	2 5

5. Imports and Exports.—Australian exports of barley during the last five years averaged 3,088,400 bushels. The grain was consigned mainly to the United Kingdom, New Zealand and Belgium, South Australia being the principal exporting State. Particulars of the Australian overseas imports and exports for the last five years are contained in the following table :—

BARLEY.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Bushels.	£	Bushels.	£	Bushels.	£
1931-32(a) ..	44	16	3,315,110	450,477	3,315,066	450,461
1932-33(a) ..	1,396	470	3,051,138	352,152	3,049,742	351,682
1933-34(a) ..	134	59	2,701,908	305,359	2,701,774	305,300
1934-35(a) ..	12	5	2,901,708	394,466	2,901,696	394,461
1935-36(a) ..	2	3	3,472,084	369,391	3,472,082	369,388

(a) Australian currency values.

In some years there is an export of Australian pearl and Scotch barley, the total for 1935-36 reaching 79,820 lb., valued at £410, consigned mainly to the Pacific Islands.

6. Imports and Exports of Malt.—In pre-war times the imports of malt into Australia were fairly extensive, the supply being obtained principally from the United Kingdom. Since 1914, however, imports have practically ceased. The production of malt in Australia is sufficient to meet local requirements and to provide a small surplus for export, which is shipped chiefly to the East and New Zealand. Details of imports and exports for the five years ended 1935-36 are given in the next table :—

MALT.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Bushels.	£	Bushels.	£	Bushels.	£
1931-32(a) ..	5	2	3,805	1,392	3,800	1,390
1932-33(a) ..	..	..	9,950	3,358	9,950	3,358
1933-34(a) ..	178	197	24,472	8,259	24,294	8,062
1934-35(a) ..	152	74	55,990	17,209	55,838	17,135
1935-36(a) ..	300	195	62,518	19,457	62,218	19,262

(a) Australian currency values.

7. Value of Barley Crop.—The estimated value of the barley crop for the season 1935-36 and the value per acre are shown in the following table :—

BARLEY.—VALUE OF CROP(a), 1935-36.

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Total ..	33,510	315,343	16,590	728,724	65,010	16,050	1,175,227
Per acre ..	£2/17/10	£2/14/2	£2/12/0	£1/17/0	£2/1/2	£3/1/5	£2/1/7

(a) Exclusive of the value of straw.

§ 8. Rice.

Experimental rice cultivation was carried on at the Yanco Experimental Farm for a number of years, but it was not until 1924-25 that an attempt was made to grow the crop on a commercial basis. In that year production amounted to 16,240 bushels from 153 acres, or an average of 106 bushels per acre. Favoured by tariff protection and high average yields the development of rice culture in the Murrumbidgee Irrigation Area made rapid progress, and the production now exceeds the annual requirements of Australia. During the past five years an annual average of 447,000 bushels of cleaned and uncleaned rice has been exported from Australia, mainly to the United Kingdom, New Zealand, Canada and the Pacific Islands.

Figures relating to area, production, etc., since 1931-32 will be found in the following table :—

RICE.—AREA, PRODUCTION, ETC., AUSTRALIA.

Year.	Area.	Production Paddy Rice.	Average Yield.	Imports.	Exports.	Retail Price.
	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Pence per lb.
1931-32 ..	19,589	1,349,869	68.91	96,101	292,453	3.48
1932-33 ..	22,034	1,901,476	86.30	104,846	260,245	3.24
1933-34 ..	20,226	2,171,544	107.36	98,495	516,437	3.24
1934-35 ..	21,746	1,888,445	88.84	89,981	629,738	3.22
1935-36 ..	21,715	2,163,580	99.64	101,571	537,174	3.27

The production from several small experimental plots in States other than New South Wales is included in the above figures, but the quantity is negligible.

§ 9. Other Grain and Pulse Crops.

In addition to the grain crops already specified, the principal other grain and pulse crops grown in Australia are beans, peas and rye. The total area under the first two mentioned crops for the season 1935-36 was 51,519 acres, giving a yield of 615,651 bushels, or an average of 11.05 bushels per acre, which was less than the average yield for the decennium ended 1935-36, viz., 14.83 bushels per acre. Beans and peas are grown chiefly in Tasmania, South Australia and Victoria. Peas are exported in considerable quantities to the United Kingdom, the chief exporting State being Tasmania. The total area under rye in Australia during the season 1935-36 was 8,475 acres, yielding 117,080 bushels, or an average of 13.02 bushels per acre, as compared with the average of 15.08 bushels for the last ten seasons. Nearly 84 per cent. of the rye grown during the season was produced in New South Wales, 8 per cent. in Victoria, and 2 per cent. in South Australia.

§ 10. Potatoes.

1. Progress of Cultivation.—(i) Area and Production. Victoria possesses peculiar advantages for the growth of potatoes, as the rainfall is generally satisfactory, and the climate is unfavourable to the spread of Irish blight; consequently the crop is grown in nearly every district except in the wheat belt. Tasmania comes next in order of importance, followed by New South Wales.

The area and production of potatoes in each State during the last five years and the average for the decennium 1927-36 are given hereunder :—

POTATOES.—AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	17,522	69,929	10,374	5,996	4,892	36,390	8	145,111
1932-33 ..	20,739	69,783	9,743	6,454	4,971	35,769	11	147,485
1933-34 ..	20,089	60,856	11,936	5,824	4,462	36,518	7	139,692
1934-35 ..	19,662	54,214	11,666	4,664	4,050	36,358	15	130,629
1935-36 ..	22,743	44,287	13,620	4,612	4,946	34,719	62	124,989
Average 10 seasons 1927-36..	18,716	63,769	10,256	4,946	5,089	36,635	20	139,435
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32 ..	33,709	206,489	17,189	24,062	20,253	95,389	11	397,102
1932-33 ..	42,403	182,471	14,017	24,814	22,309	98,232	25	384,271
1933-34 ..	43,532	142,132	20,123	19,501	21,204	81,274	9	327,775
1934-35 ..	46,033	109,329	21,627	19,377	19,162	70,018	17	285,563
1935-36 ..	62,882	104,125	24,765	19,257	26,278	85,806	127	323,240
Average 10 seasons 1927-36..	41,171	162,305	16,777	18,798	21,634	94,530	33	355,248

(a) Includes Northern Territory, 15 acres.
(b) " " " " 4 acres.

The acreages grown during the last ten years were fairly uniform, except in 1927-28, when the area was increased to 163,231, chiefly owing to larger plantings in Victoria and Tasmania. The production in 1935-36 amounted to 323,240 tons, as compared with an average of 355,248 tons for the last ten years and 344,162 tons for the previous decennial period. The record production of 507,153 tons was obtained in 1906-7.

(ii) *Average Production.* Particulars for each State for the five seasons ended 1935-36 and for the last decennium are given hereunder :—

POTATOES.—PRODUCTION YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32 ..	1.92	2.95	1.66	4.01	4.14	2.62	1.37	2.74
1932-33 ..	2.04	2.61	1.44	3.84	4.49	2.77	2.27	2.61
1933-34 ..	2.17	2.34	1.69	3.35	4.75	2.23	1.29	2.35
1934-35 ..	2.34	2.02	1.82	4.15	4.73	1.92	1.13	2.19
1935-36 ..	2.76	2.35	1.82	4.18	5.31	2.47	2.05	2.59
Average for 10 seasons 1927-36..	2.20	2.55	1.64	3.80	4.25	2.58	1.68	2.55

Compared with the average yield per acre obtained in other countries, that returned for Australia is very low; the production in New Zealand, for example, in 1935-36 averaged 5.27 tons per acre from an area of 23,000 acres, as compared with 2.59 tons per acre from 125,000 acres in Australia.

(iii) *Relation to Population.* The average annual production of potatoes per head of the population of Australia for the last five seasons was approximately 110 lb. In Tasmania, where this crop is of far greater importance in relation to population than is the case in any other State, the production per head in 1905-7 was nearly a ton, while for the last five seasons it has averaged $7\frac{1}{2}$ cwt. Details for each State for the five seasons ended 1935-36 are as follows:—

POTATOES.—PRODUCTION PER 1,000 OF POPULATION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32 ..	13	115	18	41	48	427	1	61
1932-33 ..	16	101	15	43	51	431	3	58
1933-34 ..	17	78	21	34	48	355	1	49
1934-35 ..	17	59	23	33	43	306	2	43
1935-36 ..	24	56	25	33	59	373	13	48

(iv) *Consumption.* The consumption in Australia during the last five years averaged about 44 tons per 1,000 of population, or about 99 lb. per head. From the figures shown above, therefore, it is apparent that New South Wales, Queensland and South Australia do not produce the quantities necessary for their requirements and must import from Tasmania and Victoria which have a surplus.

2. *Imports and Exports.*—Under normal conditions small quantities of potatoes are exported, principally to the Pacific Islands and Papua. In case of a shortage in Australia, supplies are usually obtained from New Zealand. Figures showing the trade for the last five years are given in the following table:—

POTATOES.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£	Tons.	£	Tons.	£
1931-32(a) ..	33	418	1,612	13,662	1,579	13,244
1932-33(a) ..	47	753	1,859	12,484	1,812	11,731
1933-34(a) ..	29	348	1,940	12,639	1,911	12,291
1934-35(a) ..	..	18	1,165	12,510	1,165	12,492
1935-36(a) ..	19	364	1,363	14,034	1,344	13,670

(a) Australian currency values.

3. *Value of Potato Crop.*—The estimated value of the potato crop of each State for the season 1935-36 is given in the following table:—

POTATOES.—VALUE OF CROP, 1935-36.

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	£	£	£	£	£	£	£	£
Total ..	499,650	826,492	229,076	162,870	187,140	654,300	1,009	2,560,537
Per acre ..	£21/19/5	£18/13/3	£16/16/5	£35/6/3	£37/16/9	£18/16/11	£16/5/6	£20/9/9

§ 11. Other Root and Tuber Crops.

1. *General.*—Root crops, other than potatoes, are not extensively grown in Australia, the total area under such crops for the season 1935-36 being only 24,934 acres. The most important were onions, mangolds, sugar beet, turnips and sweet potatoes. Of these, onions, sugar beet and mangolds are most largely grown in Victoria, turnips in Tasmania, and sweet potatoes in Queensland. The total area under onions in Australia during the season 1935-36 was 7,100 acres, giving a yield of 35,139 tons, and averaging

4.95 tons per acre. The area in 1935-36 under root crops other than potatoes and onions was 16,934 acres, from which a production of 120,048 tons was obtained, or an average of 7.09 tons per acre. The areas and yields here given are exclusive of the production of "market gardens," reference to which is made in § 17 par. 2.

2. Imports and Exports.—The only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia is that of onions. During the last five years 4,923 tons, valued at £29,131, were imported, principally from Japan, the United States of America and New Zealand, while during the same period the exports, which amounted to 13,279 tons, valued at £87,497, were shipped mainly to New Zealand, the Pacific Islands, the Philippine Islands and Canada.

§ 12. Hay.

1. General.—(i) *Area and Production.* As already stated, the chief crop in Australia is wheat grown for grain. Next in importance is hay, which for the season 1935-36 averaged 15 per cent. of the total area cropped. In most European countries the hay consists almost entirely of meadow and other grasses, but in Australia a very large proportion consists of wheat, oats and lucerne. The area under hay of all kinds in the several States during the last five years is given hereunder. The progress from 1860 onwards may be traced from the graph on page 687.

HAY.—AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	612,150	955,839	59,601	539,076	381,447	84,397	2,260	2,634,680
1932-33 ..	645,609	1,044,523	64,076	461,332	417,435	92,668	1,765	2,727,408
1933-34 ..	724,538	1,196,259	92,943	507,248	479,768	77,625	2,299	3,080,680
1934-35 ..	757,414	1,261,552	86,477	561,071	413,138	96,019	2,502	3,178,173
1935-36 ..	658,810	1,140,361	71,309	566,064	494,495	74,741	1,690	3,007,470
Average 10 seasons								
1927-36 ..	698,276	1,073,581	63,743	531,837	413,381	85,303	1,985	2,868,106
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32 ..	811,243	1,069,276	91,275	647,058	453,353	92,595	2,659	3,167,459
1932-33 ..	908,931	1,380,028	82,104	765,389	485,368	111,138	1,880	3,771,011
1933-34 ..	920,480	1,353,796	144,250	539,846	512,439	109,397	2,540	3,582,748
1934-35 ..	1,004,761	1,464,204	154,157	571,133	462,947	150,083	3,303	3,810,708
1935-36 ..	837,386	1,346,953	122,687	586,658	504,571	96,888	2,534	3,497,677
Average 10 seasons								
1927-36 ..	908,408	1,284,596	98,959	554,787	460,065	123,441	2,353	3,432,609

Owing to various causes, the principal being the variation in the relative prices of grain and hay and the favourableness or otherwise of the season for a grain crop, the area under hay is liable to fluctuate considerably. The area under hay in Australia during the season 1915-16, 3,597,771 acres, was the largest on record, whilst the average during the last decennium amounted to 2,868,106 acres.

(ii) *Average Production.* During the last ten years Tasmania and Queensland show the highest average production per acre, although the area sown in these States is the smallest. For the same period the lowest yield for Australia as a whole was that

of 21 cwt. per acre in 1929-30, while the highest was that of 26 cwt. in 1932-33. The average for the decennium was nearly 24 cwt. Particulars for the several States for the seasons 1931-32 to 1935-36 and the average for the last ten years are given hereunder :—

HAY.—PRODUCTION PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Aus- tralia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32	1.33	1.12	1.53	1.20	1.19	1.10	1.18	1.20
1932-33	1.41	1.33	1.28	1.23	1.16	1.52	1.07	1.31
1933-34	1.27	1.13	1.55	1.06	1.07	1.41	0.92	1.16
1934-35	1.33	1.16	1.78	1.02	1.12	1.56	1.34	1.20
1935-36	1.27	1.18	1.72	1.04	1.02	1.30	1.50	1.16
Average for 10 seasons								
1927-36	1.30	1.20	1.55	1.04	1.11	1.45	1.19	1.20

(iii) *Varieties Grown.* Information in regard to the crops cut for hay is available for all States excepting Tasmania. It is known, however, that oaten hay constitutes the most important variety grown in the island State.

Details for the last five seasons are given in the following table :—

HAY.—VARIETIES GROWN.

Varieties.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Acres.	Acres.	Acres.	Acres.	Acres.
NEW SOUTH WALES—					
Wheaten	292,234	290,556	324,129	271,272	224,032
Oaten	222,212	248,222	275,493	349,174	328,806
Barley	740	955	933	1,354	930
Lucerne	96,396	105,246	123,280	134,703	103,478
Other	568	630	703	911	904
Total	612,150	645,609	724,538	757,414	658,810
VICTORIA—					
Wheaten	139,683	89,549	155,688	117,430	77,795
Oaten	781,932	860,854	945,855	1,016,205	926,293
Lucerne, etc. ..	34,224	94,120	94,716	127,911	136,273
Total	955,839	1,044,523	1,196,259	1,261,552	1,140,361
QUEENSLAND—					
Wheaten	5,282	5,498	6,058	3,472	1,789
Oaten	1,617	2,724	4,280	3,426	2,928
Lucerne	47,547	52,925	77,473	75,538	62,779
Other	5,155	2,929	5,132	4,041	3,813
Total	59,601	64,076	92,943	86,477	71,309
SOUTH AUSTRALIA—					
Wheaten	250,285	205,372	246,999	264,373	213,703
Oaten	273,375	243,015	247,879	280,710	334,529
Lucerne	5,660	3,704	3,572	4,444	5,093
Other	9,756	9,241	8,798	11,544	12,730
Total	539,076	461,332	507,248	561,071	566,064
WESTERN AUSTRALIA—					
Wheaten	197,982	173,327	216,688	138,989	214,400
Oaten	167,326	224,006	238,718	251,288	250,039
Lucerne	190	106	179	238	63
Other	15,949	19,996	24,183	22,623	29,987
Total	381,447	417,435	479,768	413,138	494,495

Wheat is most largely used for hay in New South Wales and South Australia, oats in Victoria, Western Australia and Tasmania, and lucerne in Queensland. For all States the proportions of the principal kinds of hay produced average about 60.0 per cent. for oats, 23.7 per cent. for wheaten, 10.0 per cent. for lucerne, and 6.3 per cent. for other hay.

2. **Comparison with Other Countries.**—As already noted, the hay crops of most European countries consist of grasses of various kinds, amongst which clover, lucerne, sainfoin and rye grass occupy prominent places. The statistics of hay production in these countries are not prepared on a uniform basis, consequently any attempt to furnish extensive comparisons would be misleading. It may be noted, however, that in Great Britain the production of hay from clover, sainfoin, etc., for the year 1935 amounted to 2,482,000 tons from 1,782,000 acres, while from permanent grasses a yield of 5,104,000 tons of hay was obtained from 4,821,000 acres, giving a total of 7,586,000 tons from 6,603,000 acres, or an average of about 23 cwt. per acre.

3. **Imports and Exports.**—Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for oversea trade, and consequently does not in such circumstances figure largely amongst the imports and exports of Australia. During 1935-36, 1,663 tons were imported, while the exports amounted to 2,482 tons, valued at £13,430, the principal purchases being made by Malaya (British), India, Ceylon and Hong Kong.

4. **Value of Hay Crop.**—The following table shows the value, and the value per acre, of the hay crop of the several States for the season 1935-36 :—

HAY.—VALUE OF CROP, 1935-36.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
Total Value	£3,473,930	£3,111,278	£607,570	£1,171,868	£1,224,876	£460,200	£11,249	£10,060,971
Value per acre	£5/5/6	£2/14/7	£8/10/5	£2/1/5	£2/9/6	£6/3/2	£6/13/1	£3/6/11

§ 13. Green Forage.

1 **Nature and Extent.**—A considerable area is devoted to the production of green forage, mainly in connexion with the dairying industry. The total area so cropped is considerably swollen in adverse seasons by the inclusion of wheat or other cereal crops deemed unsuitable for the production of either grain or hay. Under normal conditions, the principal crops cut for green forage are maize, wheat, sorghum, oats, barley, rye, rape and lucerne, while small quantities of sugar-cane also are so used. Particulars concerning the area under green forage in the several States during each of the last five years are given in the following table :—

GREEN FORAGE.—AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32	367,346	119,006	309,957	58,604	101,370	23,024	724	980,031
1932-33	405,200	107,732	392,702	46,232	115,785	18,522	953	1,087,102
1933-34	444,946	121,737	311,462	70,147	140,402	25,689	609	1,121,682
1934-35	477,060	115,037	338,312	91,783	180,233	24,941	548	1,233,014
1935-36	610,401	111,056	379,651	98,121	197,931	25,500	548	1,423,208

2. *Value of Green Forage Crops.*—The value of these crops is variously estimated in the several States, and the Australian total for the season 1935-36 may be taken approximately as £2,703,268, or about £1 18s. od. per acre.

§ 14. Sugar-cane and Sugar-beet.

1. *Sugar-cane.*—(i) *Area.* Sugar-cane for sugar-making purposes is grown only in Queensland and New South Wales, and much more extensively in the former than in the latter State. Thus, of a total area of 334,910 acres under sugar-cane in Australia for the season 1935-36, there were 314,700 acres, or about 94 per cent., in Queensland. Sugar-cane growing appears to have been started in Australia in or about 1862, as the earliest statistical record of sugar-cane as a crop is that which credits Queensland with an area of 20 acres for the season 1862-63. In the following season the New South Wales returns show an area of 2 acres under this crop. The area under cane in New South Wales reached its maximum in 1895-96 with a total of 32,027 acres. Thenceforward, with slight variations, it gradually fell to 10,490 acres in 1918-19, but from that year it expanded until 1924-25, when about 20,000 acres were planted. Since 1924-25, the area has fluctuated between 15,000 acres and 20,000 acres, the average for the decennium ended 1935-36 amounting to 16,939 acres. In Queensland, although fluctuations in area are manifest, the general trend has been upwards, the acreage under cane for the season 1935-36 being the highest on record, viz., 314,700 acres. The area under sugar-cane in Australia from 1931-32 and the average for the past decennium are given in the following table, and particulars for earlier years may be seen from the graph on page 687:—

SUGAR-CANE.—AREA.

Season.	New South Wales.		Queensland.		Australia.		Total.
	Pro- ductive.	Unpro- ductive.	Pro- ductive.	Unpro- ductive.	Pro- ductive.	Unpro- ductive.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1931-32	8,272	7,647	233,304	76,514	241,576	84,161	325,737
1932-33	7,796	8,349	205,046	86,090	212,842	94,439	307,281
1933-34	10,015	6,914	228,154	83,756	238,169	90,670	328,839
1934-35	7,572	10,959	218,426	85,500	225,998	96,459	322,457
1935-36	10,416	9,794	228,515	86,185	238,931	95,979	334,910
Average 10 seasons							
1927-36	8,512	8,427	215,911	78,495	224,423	86,922	311,345

(ii) *Productive and Unproductive Cane.* The areas given in the preceding table do not include the small acreage cut for green forage which in 1935-36 amounted to 4,610 acres in Queensland. The whole area was not necessarily cut for crushing during any one season, there being always a considerable amount of young and "stand-over" cane, as well as a small quantity required for plants. The season in which the highest acreage is recorded may not show the greatest area of productive cane cut for crushing, as was evidenced in 1935-36, when, although the total acreage was greater, the area cut was less than in the year 1931-32.

(iii) *Production of Cane and Sugar.* For Queensland, statistics of the production of sugar-cane are not available prior to the season 1897-98. In that season the total for Australia was 1,073,883 tons, as against the maximum production of 4,898,040 tons in 1933-34. The average production of cane during the decennium ended 1935-36 was 4,121,874 tons. With the exception of 1932-33, the yield of sugar during each of

the five years ended 1935-36 has exceeded 600,000 tons. The average for the decennium amounted to 561,737 tons. Particulars relative to the total production of cane and sugar for the last five years are as follows. The averages for the past ten seasons are also included for comparison:—

SUGAR-CANE.—PRODUCTION OF CANE AND SUGAR.

Season.	New South Wales.		Queensland.		Australia.	
	Cane.	Sugar.	Cane.	Sugar.	Cane.	Sugar.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32	179,153	22,459	4,034,300	581,276	4,213,453	603,735
1932-33	156,818	18,567	3,546,370	514,027	3,703,188	532,594
1933-34	230,918	27,586	4,667,122	638,559	4,898,040	666,145
1934-35	227,424	29,428	4,271,380	611,161	4,498,804	640,589
1935-36	280,472	36,461	4,220,435	610,080	4,500,907	646,541
Average 10 seasons						
1927-36	202,671	23,982	3,919,203	537,755	4,121,874	561,737

The production of raw sugar in Australia in 1935-36 amounted to 646,541 tons manufactured from 4,500,907 tons of cane, and was only slightly below the record production of 1933-34 which amounted to 666,145 tons. Official data are not available regarding the total number engaged in the sugar industry in Queensland, other than the number of growers and employees in sugar mills which in 1935-36 totalled 7,538 and 4,432 respectively. In the report of the Sugar Inquiry Committee, 1931, however, it was stated that the number of persons employed in all branches of the industry was 28,737. In addition, there is the employment afforded in New South Wales, particulars of which are not available, but the number is probably in the vicinity of 2,000.

Final figures for the 1936-37 season are not yet complete, but it is estimated that the production of raw sugar amounted to 773,674 tons from 5,420,511 tons of cane crushed. These quantities represent the greatest production ever recorded in Australia and are far in excess of the previous record figures of 1933-34. Early indications point to a slight reduction to 740,000 tons in 1937-38.

(iv) *Average Production of Cane and Sugar.* Owing to climatic variation, comparison between the average yields of cane per productive acre in Queensland and New South Wales cannot be accurately made except on an annual basis. In New South Wales the crop matures in from 20 to 24 months, whereas in Queensland a period of from 12 to 14 months is sufficient. Allowing for the disparity in maturity periods, the average annual yields of cane per productive acre during the decennium ending 1935-36 were 12.90 tons for New South Wales, and 16.75 tons for Queensland. Similarly, the yields of sugar per acre crushed for the same period were estimated at 1.54 tons and 2.29 tons respectively. Leaving aside the consideration mentioned above, the yields of cane and sugar per acre crushed for Australia for the ten years ended 1935-36 were 18.37 tons and 2.50 tons respectively, as compared with 18.21 tons and 2.26 tons for the decennium ended 1925-26.

(v) *Quality of Cane.* The quantity of cane required to produce a ton of sugar varies with the variety planted, the district and the season. For the decennium ended 1935-36, it took 7.34 tons of cane to produce 1 ton of sugar or 13.62 per cent. of its total weight. As the result of the systematic study of cane culture in Queensland and improvements in field and mill methods the sugar content of the cane has been considerably increased in recent years, and in 1930-31 only 6.83 tons of cane were required to produce one ton of sugar. It is believed that this is the highest sugar content obtained anywhere in the world. During the ten years ended 1925-26 it required on the average 8.00 tons of cane to produce one ton of sugar in Australia, whereas the average figure for the last decennium was reduced to 7.34 tons.

SUGAR-CANE AND SUGAR.—YIELD PER ACRE.

Season.	New South Wales.			Queensland.			Australia.		
	Cane per acre crushed.	Sugar per acre crushed.	Cane to each ton of Sugar.	Cane per acre crushed.	Sugar per acre crushed.	Cane to each ton of Sugar.	Cane per acre crushed.	Sugar per acre crushed.	Cane to each ton of Sugar.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32	21.66	2.72	7.98	17.29	2.49	6.94	17.44	2.50	6.98
1932-33	20.12	2.38	8.45	17.30	2.51	6.90	17.40	2.50	6.95
1933-34	23.06	2.75	8.37	20.46	2.80	7.31	20.57	2.80	7.35
1934-35	30.03	3.89	7.73	19.56	2.80	6.99	19.91	2.83	7.02
1935-36	26.93	3.50	7.09	18.47	2.67	6.92	18.84	2.71	6.96
Average 10 seasons									
1927-36	23.81	2.82	8.45	18.15	2.49	7.29	18.37	2.50	7.34

The Bureau of Sugar Experiment Stations in Queensland is rendering useful service to the sugar industry by advocating and demonstrating better methods of cultivation, the more scientific use of fertilizers, lime, etc., and by producing and distributing improved varieties of cane.

(vi) *Relation to Population.* The yield of raw sugar in Australia during the last five years was more than sufficient to supply local requirements, the average production during the period amounting to 197 lb. per head of population. Details for the period 1931-32 to 1935-36 are as follows:—

RAW SUGAR.—PRODUCTION PER HEAD OF POPULATION.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	lb.	lb.	lb.	lb.	lb.
New South Wales	20	16	24	25	31
Queensland	1,351	1,221	1,505	1,425	1,406
Australia	207	181	224	214	215

(vii) *Consumption.* The average annual consumption of raw sugar during the five years ended 1935-36 was estimated at 338,500 tons, equal to 114 lb. of raw sugar or 100 lb. of refined sugar per head of population. Sugar contained in jam, preserved fruit, milk, etc., exported during the period has been excluded in arriving at the figures quoted. The quantity of sugar used during the last five years in factories is shown in the following table, the figures including, where necessary, estimates of consumption based on the sugar contents of the finished product. Particulars of sugar used in establishments not classified as factories are not available, and consequently the quantities shown below are deficient to that extent.

SUGAR.—CONSUMPTION IN FACTORIES, AUSTRALIA.

Factories.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	Tons.	Tons.	Tons.	Tons.	Tons.
Aerated Waters and Cordials	5,665	5,639	5,779	6,490	7,786
Bacon Factories	96	50	60	66	165
Bakeries—including Cakes and Pastry	5,920	5,789	8,110	9,032	10,404
Biscuits	4,207	5,158	5,710	6,339	6,663
Breweries	9,170	9,117	10,023	11,208	12,404
Condensed and Concentrated Milk	6,731	6,796	6,620	7,501	5,547
Confectionery, Ice Cream, &c.	16,277	18,101	17,685	20,356	21,123
Jams, Jellies and Preserved Fruit	26,329	28,667	26,108	28,022	31,930
Jelly Crystals	556	541	649	699	665
Total	74,951	79,858	80,744	89,713	96,687

2. **Sugar-beet.**—(i) *Area and Production.* Victoria is the only State at present growing beets for sugar, and particulars in regard to acreage and production for the last four years and for the decennium 1917-26 are incorporated in the table below :—

SUGAR-BEET.—AREA AND PRODUCTION, VICTORIA.

Particulars.		Average 10 seasons 1917-26.	1932-33.	1933-34.	1934-35.	1935-36.
Area harvested ..	acres	1,516	3,155	3,234	3,062	3,165
Production ..	tons	17,450	36,740	50,625	40,788	37,634
Average per acre ..	"	11.51	11.65	15.65	13.32	11.89
Sugar produced ..	"	2,073	5,701	5,303	4,998	5,115

Seasonal conditions were not so favourable during 1935-36 and consequently reduced yields were recorded; the production from 3,165 acres amounted to 37,634 tons of beet which yielded 5,115 tons of sugar. The quantity of beet required to produce one ton of sugar was 7.35 tons as compared with 8.16 tons for the previous year. The average production of beets per acre was 11.89 tons, and the average for the ten years ended 1935-36 was 11.65 tons.

(ii) *Encouragement of Beet-growing.* The irrigation scheme on the Macallister River has provided an assured water supply for the district and has enabled the industry to expand. A fine grade of white sugar is manufactured at Maffra, and considerable quantities of beet pulp and molasses are distributed for stock feed.

3. **Sugar Bounties.**—Reference is made to the various Acts in connexion with sugar bounties and sugar excise tariffs in previous issues of the Year Book. (See No. 6, pp. 394 to 396).

4. **Sugar Purchase by Commonwealth Government.**—The steps taken by the Commonwealth Government in connexion with this matter were alluded to in previous issues of the Official Year Book. (See No. 18, p. 720.)

5. **Sugar Agreement in Australia—Embargo on Imports, etc.**—By agreement between the Commonwealth and Queensland Governments in 1925, the embargo on the importation of foreign sugar, which was first introduced in September, 1915, was extended for three years from 1st September, 1925. The price of raw sugar needed for home consumption was fixed at £27 per ton, £1 of which was to defray administrative and general expenses of the Sugar Board and to provide special concessions to certain consumers of sugar. The embargo was later extended for a further period of three years until 1st August, 1931, on practically the same terms as previously. In response to representations, the Commonwealth Government appointed a Committee of Inquiry on the 23rd August, 1931, to report on the industry. The Committee consisted of eight members, representing the various interests concerned. The reports of the Committee were made available in March, 1931, and the renewal of the sugar agreement with certain modifications was recommended. The terms of the new agreement followed largely on those previously in force, particularly as regards the embargo on imports and fixation of prices. The assistance to the fruit industry was increased from an average of £180,000 per annum to £315,000 by way of grant from the sugar industry. The agreement was signed on 1st June, 1931, and was to remain in force for a period of five years from 1st September, 1931. In 1932, however, conferences arranged between the Commonwealth Government and representatives of the industry agreed to a reduction of $\frac{1}{2}$ d. per lb. in the retail price of sugar from 1st January, 1933, until the end of the period of the agreement (31st August, 1936). It was also decided to reduce the amount of the assistance to the fruit industry to £200,000. A renewal of the agreement for a period of five years commencing 1st September, 1936, was negotiated between the Commonwealth and Queensland Governments in July, 1935. No alteration was made in the wholesale or retail price of sugar, but an increase of £16,000 per annum was granted to the fruit industry.

6. **International Sugar Agreement.**—Delegates of 21 Nations representing 90 per cent. of producers met in London and entered into an agreement on 6th May, 1937, providing for the regulation of the production and marketing of sugar in the world during a period of five years from 1st September, 1937. The object of the agreement is to assure an adequate supply of sugar at a price not exceeding the cost of production, including a reasonable profit, of efficient producers. For this purpose, each country was given a basic annual export quota—Australia was allotted 400,000 long tons—which will be increased in proportion to any expansion in sugar consumption. By this means, and by limitations on stocks and measures to encourage more production, it is expected that the International Sugar Council, which has been established to administer the agreement, will be able to hold in proper balance the supplies and requirements of sugar.

7. **Net Return for Sugar Crop.**—Calculations by the Sugar Board regarding the disposal of the crop, net value of exports and the average price realized during each of the last five years will be found in the following table :—

SUGAR.—NET RETURN, ETC., FOR CROP, AUSTRALIA.

Year.	Percentage Exported. (a)	Net Value of Exports per Ton. (a)	Average Price per Ton for Whole Crop. (a)	Estimated Value of Crop.
	Per cent.	£ s. d.	£ s. d.	£
1932-33	36.80	8 5 9	18 17 9	10,394,925
1933-34	47.89	8 0 6	16 6 3	10,640,318
1934-35	50.56	7 11 3	15 13 9	10,791,092
1935-36	47.97	7 18 9	16 5 11	11,010,892
1936-37	54.07	7 19 0	15 7 4	(b)

(a) As supplied by the Queensland Sugar Board. (b) Not yet available.

The estimated value of the raw sugar produced has been taken from the audited accounts of the Queensland Sugar Board. The values stated represent the gross receipts from sales in Australia and overseas less refining costs, freight, administrative charges, etc., and export charges, but not deducting concessions to the fruit industry and other rebates which in 1935-36 amounted to £265,387. The value thus obtained represents the net market value of all raw sugar sold, and since 1933 is divided between the growers and millers in the following approximate proportions, viz., 70 per cent. and 30 per cent. respectively. Prior to that year the distribution was about two-thirds to the grower and one-third to the miller.

8. **Imports and Exports of Sugar.**—Owing to the embargo and the increased production of sugar in Australia the imports have practically ceased. Particulars concerning the imports and exports of cane sugar for the last five years are as follows :—

SUGAR.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£	Tons.	£	Tons.	£
1931-32(a) .. ..	..	6	287,920	2,514,724	287,920	2,514,718
1932-33(a)	13	265	187,061	1,490,036	187,048	1,489,771
1933-34(a)	3	48	307,980	2,295,203	307,977	2,295,155
1934-35(a)	1	38	306,497	2,195,893	306,496	2,195,855
1935-36(a)	22	415	299,002	2,175,504	299,880	2,175,089

(a) Australian currency values.

The export value quoted in the above table represents the value f.o.b. at which the sugar is sold overseas.

9. **Sugar By-products.**—Large quantities of molasses are produced as a by-product in the sugar mills. Details for a series of years of the quantity produced and the proportions used for distilling, fuel, manure and other purposes will be found in Chapter XXIV. —Manufacturing. A distillation plant erected at the Plane Creek Central Sugar Mill, Mackay, was opened during 1927 and produces power alcohol of excellent quality.

A material known as "megass board" can be made from the residuum of crushed fibre after the removal of the sugar content from the sugar cane, and the possibility of the manufacture of artificial silk from the same material has also been considered. Up to the present, however, there is no record of commercial production of artificial silk, but a fibre board suitable for insulation and lining is now being produced.

10. **Sugar Prices.**—The prices of sugar in Australia from 1915 to 1941 are shown in the following table. During recent years the prices were fixed in accordance with the agreements referred to on page 715.

SUGAR.—PRICES FOR CONSUMPTION IN AUSTRALIA.

Date of Determination.	Raw Sugar.		Refined Sugar.	
	Price to Grower and Miller per Ton.		Wholesale Price per Ton.	Retail Price per lb.
	£	s. d.	£	s. d.
19.7.15 to 15.1.16	18	0 0	25	10 0
16.1.16 to 30.6.17	18	0 0	29	5 0
1.7.17 to 24.3.20	21	0 0	29	5 0
25.3.20 to 30.6.20	21	0 0	49	0 0
1.7.20 to 31.10.22	30	6 8	49	0 0
1.11.22 to 30.6.23	30	6 8	42	0 0
1.7.23 to 21.10.23	27	0 0	42	0 0
22.10.23 to 31.8.25	26	0 0	37	11 4
1.9.25 to 31.8.31	(a) 26	10 0	37	6 8
1.9.31 to 4.1.33	26	0 0	37	6 8
5.1.33 to 31.8.36	24	0 0	33	4 0
1.9.36 to 31.8.41	24	0 0	33	4 0

(a) The price of raw sugar for the years 1925 to 1937 was estimated at from £24 to £26 10s. per ton, but as the result of the values received for the surpluses exported, the actual price obtained in 1925-26 was £19 10s. 7d.; in 1926-27, £24 10s. 10d.; in 1927-28, £22 0s. 4d.; in 1928-29, £20 17s. 11d.; in 1929-30, £20 8s. 2d.; in 1930-31, £19 12s. 11d.; in 1931-32, £18 2s. 11d.; in 1932-33, £18 17s. 9d.; in 1933-34, £16 6s. 3d.; in 1934-35, £15 13s. 9d.; in 1935-36, £16 5s. 11d. and in 1936-37, £15 7s. 4d.

§ 15. Vineyards.

1. **Progress of Cultivation.**—(i) *Area of Vineyards.* The date of introduction of the vine into Australia has been variously set down by different investigators, the years 1815 and 1828 being principally favoured. It would seem, however, that plants were brought out with the first fleet in 1788, consequently the Australian vine is as old as Australian settlement. As already mentioned, a report by Governor Hunter gives the area under vines in 1797 as 8 acres. From New South Wales the cultivation spread to Victoria and South Australia, and these States have now far outstripped the mother State in the area under this crop. In Queensland and Western Australia also, vine growing has been carried on for many years, but little progress has been made. In Tasmania the climate is not favourable to the growth of grapes. The purposes for which grapes are grown in Australia are three in number, viz. :—(a) for wine-making, (b) for table use, and (c) for drying. The total area under vines in the several States

during each of the last five years and the average for the past decennium are given in the following table, while particulars from 1860 onwards may be gathered from the graph on page 687.

VINEYARDS.—AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32..	15,360	38,215	1,749	52,498	5,139	There are no vineyards in Tasmania.	112,961
1932-33..	15,444	39,144	1,868	52,479	5,511		114,446
1933-34..	15,243	40,485	1,963	52,880	5,700		116,271
1934-35..	15,143	41,180	1,926	53,361	5,737		117,347
1935-36..	15,158	41,081	2,470	54,219	6,051		118,979
Average 10 seasons 1927-36	15,166	40,259	1,864	52,274	5,324		114,887

The total area under vines in Australia has shown a substantial expansion since 1860. This development has been interrupted from time to time, decreases occurring in 1896, the years between 1904 and 1910, and in 1914. Since the last named year the area increased without interruption from about 61,000 acres to more than 114,000 acres in 1924-25, due largely to the planting of varieties suitable for drying. Subsequently the area fluctuated somewhat but increased again to the record area of 118,979 acres in 1935-36.

(ii) *Report on the Wine Industry.* An investigation into conditions in the wine industry was undertaken by the Commonwealth Director of Development and the Senior Inspector of Excise, Department of Trade and Customs, and a comprehensive report was presented to Parliament on the 17th July, 1931.

(iii) *Wine Production, Bounties, etc.* The production of wine has not increased as rapidly as the suitability of soil and climate would appear to warrant, owing chiefly to two causes. In the first place Australians are not a wine-drinking people; it is estimated that they consume approximately 5 million gallons or 0.8 gallons per head per annum and consequently the local market is restricted. Secondly, the comparatively new and unknown wines of Australia must compete in the markets of the old world with the well-known and long-established brands from other countries. Continued efforts are being made to bring the Australian wines under notice, and with the assistance of a Commonwealth bounty on the export of fortified wine of specified strength, the industry has been greatly stimulated. Particulars of the Wine Export Bounty are shown in § 18 hereafter. The Wine Export Bounty Act 1930 which provided for payment at the rate of 1s. 9d. per gallon was replaced by a new Act in 1934 which fixed the rate at 1s. 3d. per gallon for the two years ending 28th February, 1937, and thereafter at a reduction of 1d. per gallon for each succeeding year until 1940 when it will be 1s. per gallon.

At the Imperial Economic Conference at Ottawa in 1932, the margin of preference granted by the Government of the United Kingdom was 2s. per gallon on Australian wines not exceeding 27 degrees of proof spirit. Hitherto the duties imposed were as follows:—Empire wines not exceeding 27 degrees, 2s. per gallon, foreign wines not exceeding 25 degrees, 3s. per gallon, a margin of preference of 1s. per gallon. The margin of 2 degrees in the strength of Empire wines is also considered a measure of preference. The bulk of the wine exported from Australia contains more than 27 degrees of proof spirit, and, under the duties in force in the United Kingdom in 1932, Australian wines of a strength exceeding 27 but under 42 degrees enjoy a preference of 4s. per gallon. New or additional preferences are also hoped for from certain Crown Colonies and Protectorates.

The quantity of wine produced in the several States during the last five seasons together with the average for the past decennium is given in the table hereunder :—

WINE.—PRODUCTION.

Season.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tas- mania.	Australia.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	No production of wine in Tasmania.	Gallons.
1931-32 ..	1,589,707	1,530,061	41,456	10,664,546	364,752		14,190,522
1932-33 ..	2,075,737	1,610,649	35,301	12,260,971	435,003		16,417,661
1933-34 ..	1,813,034	1,691,391	31,796	10,032,012	427,458		13,995,691
1934-35 ..	1,539,274	1,276,176	38,050	12,914,905	496,252		16,264,657
1935-36 ..	2,567,812	1,683,049	22,569	13,023,587	430,941		17,727,958
Average 10 sea- sons 1927-36	1,825,754	1,643,808	37,501	12,524,237	379,002		16,410,302

2. Imports and Exports of Wine.—(i) *Imports.* The principal countries of origin of wine imported into Australia are France, Spain, Portugal and Italy, the bulk of the sparkling wines coming from France. The imports for the last five years are given hereunder :—

WINE.—IMPORTS, AUSTRALIA.

Year.	Quantity.			Value.(a)		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£	£	£
1931-32 ..	325	8,098	8,423	1,026	5,224	6,250
1932-33 ..	2,402	12,411	14,813	8,042	12,015	20,057
1933-34 ..	5,469	18,772	24,241	16,612	16,137	32,749
1934-35 ..	7,936	20,367	28,303	26,577	17,422	43,999
1935-36 ..	5,701	24,214	29,915	19,017	18,258	37,275

(a) Australian currency values.

(ii) *Exports.* Practically all of the wine exported from Australia is sent to the United Kingdom; less than 200,000 gallons are sent to other countries. New Zealand absorbs the major portion of this quantity although exports to Canada have increased under the Canadian-Australian Trade Treaty; the former took 108,407 gallons valued at £44,897 while the latter imported 31,637 gallons valued at £13,308 during 1935-36. The amendment to the liquor laws of the United States enabled Australia to export 61,917 gallons valued at £18,529 to that country in 1933-34, 31,032 gallons valued at £7,684 in 1934-35 and 709 gallons valued at £1,167 in 1935-36. Exports for the last five years are given in the following table :—

WINE.—EXPORTS, AUSTRALIA.

Year.	Quantity.			Value.(a)		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£	£	£
1931-32 ..	4,123	3,471,462	3,475,585	6,705	901,837	908,542
1932-33 ..	1,656	3,096,114	3,097,770	2,392	788,409	790,801
1933-34 ..	5,289	3,063,449	3,068,738	6,683	796,705	803,388
1934-35 ..	4,111	3,392,570	3,396,681	5,854	806,334	812,188
1935-36 ..	4,070	3,705,557	3,709,627	5,649	928,955	934,604

(a) Australian currency values.

3. Other Viticultural Products.—(i) *Table Grapes*. Grapes for table use are grown in all the States except Tasmania, but the greatest development in the industry has taken place in the drying of raisins and currants, particularly in Victoria and South Australia. The quantities of table grapes grown during the last five seasons are as follows:—

TABLE GRAPES.—PRODUCTION.

Season.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1931-32	3,542	3,807	1,961	670	3,053	13,033
1932-33	5,401	4,008	2,165	957	2,679	15,210
1933-34	4,469	3,837	2,050	695	2,602	13,653
1934-35	3,638	3,113	1,900	646	3,214	12,511
1935-36	4,376	4,215	2,184	547	2,676	13,998

(ii) *Raisins and Currants*. The quantities of raisins (sultanas and lexias) and currants dried during each of the last five seasons are given in the following table:—

RAISINS(a) AND CURRANTS.—PRODUCTION.

Season.	N. S. Wales.		Victoria.		South Aust.		Western Aust.		Australia.	
	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1931-32	3,043	497	29,702	7,832	9,234	7,820	797	1,428	42,776	17,577
1932-33	4,909	670	42,568	7,814	12,434	6,390	704	1,536	60,615	16,410
1933-34	3,922	721	33,962	7,476	12,480	8,018	595	1,323	50,959	17,538
1934-35	3,381	755	29,637	8,801	12,234	9,259	646	2,037	45,808	20,852
1935-36	4,158	864	35,486	4,421	10,508	5,371	778	1,938	50,930	13,114
Average 10 seasons 1927-36	3,255	564	32,447	7,302	9,668	6,815	668	1,503	46,038	16,184

(a) Sultanas and Lexias.

4. Imports and Exports of Raisins and Currants.—The following table gives the overseas imports and exports of raisins and currants during each of the last five years:—

RAISINS AND CURRANTS.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
RAISINS.						
	tons.	£	tons.	£	tons.	£
1931-32(b) ..	(a)	80	29,454	1,353,987	29,454	1,353,907
1932-33(b) ..	2	276	35,439	1,728,581	35,437	1,728,305
1933-34(b) ..	5	570	46,825	1,867,134	46,820	1,866,564
1934-35(b) ..	(c)104	(c)5,988	40,041	1,447,686	39,937	1,441,698
1935-36(b) ..	(a)	20	37,998	1,501,146	37,998	1,501,126
CURRANTS.						
	(a)					
1931-32(b) ..	(a)	30	13,505	597,698	13,505	597,668
1932-33(b) ..	(a)	35	11,134	450,502	11,134	450,467
1933-34(b) ..	..	..	15,659	632,978	15,659	632,978
1934-35(b) ..	(a)	15	14,562	583,422	14,562	583,407
1935-36(b) ..	(a)	35	9,945	375,923	9,945	375,888

(a) Quantity negligible.

(b) Australian currency values.

(c) Re-imports.

Since 1912 Australia has not only produced sufficient raisins and currants for home consumption, but has been able to maintain a large export trade. The average annual production for the decennium ended 1935-36 exceeded 62,200 tons, of which 46,200 tons were exported and 16,000 tons were available for local requirements. The chief countries importing Australian raisins and currants are the United Kingdom, Canada and New Zealand, the quantities exported thereto in 1935-36 being 57, 30 and 11 per cent. respectively. Exports to Canada have increased from 4,600 tons in 1928-29 to 14,586 tons in 1935-36. Under the terms of the agreement reached at the Imperial Economic Conference at Ottawa in 1932, the tariff in the United Kingdom on dried fruits imported from foreign countries was increased from 7s. per cwt. to 10s. 6d. per cwt. As already stated, the United Kingdom absorbs 57 per cent. of Australia's exports, and the preference given should prove of considerable benefit to the Australian grower. The existence of the Anglo-Grecian Trade Treaty, however, precludes any immediate prospect of an advance in the present rate of preference—2s. per cwt.—being secured on Australian currants imported into Great Britain.

§ 16. Orchards and Fruit Gardens.

1. *Progress of Cultivation.*—The greatest area under orchards and fruit gardens was attained in 1933-34 when 281,989 acres were planted, but owing to reductions in the areas under citrus and bananas the total area had declined to 271,271 acres in 1935-36. The total area under orchards and fruit gardens in the several States during the last five years is given in the following table:—

ORCHARDS AND FRUIT GARDENS.—ARÉA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	79,890	76,834	34,974	29,077	19,530	32,403	48	272,756
1932-33 ..	83,909	77,173	30,578	29,109	20,026	32,774	58	273,627
1933-34 ..	90,227	76,945	31,511	28,899	20,658	33,679	70	281,989
1934-35 ..	87,035	76,254	30,646	29,167	20,811	33,779	70	277,762
1935-36 ..	82,702	75,788	28,544	29,122	21,667	33,372	76	271,271

2. *Varieties of Crops.*—(i) *General.* The varieties grown differ in various parts of the States, ranging from such fruits as the pineapple, paw-paw, mango and guava of the tropics to the strawberry, the raspberry and the currant of the colder parts of the temperate zone. The principal varieties grown in Victoria are the apple, peach, pear, orange, plum and apricot. In New South Wales citrus fruits (oranges, lemons, etc.) occupy the leading position, although apples, peaches, plums, pears, cherries and bananas are extensively grown. In Queensland, the banana, the pineapple, the apple, the orange, the peach, the plum and the coco-nut are the varieties most largely cultivated. In South Australia, in addition to the apple, orange, apricot, plum, peach and pear, the almond and the olive are extensively grown. In Western Australia, the apple, orange, pear, plum, peach, apricot and fig are the chief varieties. In Tasmania, the apple occupies nearly four-fifths of the fruit-growing area, but small fruits, such as the currant, raspberry and gooseberry are extensively grown, while the balance of the area is taken up with the pear, apricot, plum and cherry. The following tables give the acreage—bearing and non-bearing—under the principal kinds of fruit, and the quantity and value of fruit produced.

(ii) *Area.* The table hereunder shows the total acreage for 1935-36:—
ORCHARDS AND FRUIT GARDENS.—AREA, 1935-36.

Fruit.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Federal Capital Territory.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Apples ..	16,665	30,466	5,452	10,419	12,702	29,191	48	102,003
Apricots ..	1,846	4,081	145	2,987	695	1,408	3	11,105
Bananas ..	13,029	..	8,500	..	272	..	..	21,801
Cherries ..	3,711	1,397	10	923	41	109	2	6,193
Citrus—								
Oranges ..	20,338	5,367	3,222	4,601	2,983	..	5	41,255
Mandarins ..	4,552							
Lemons ..	2,738							
Other ..	594							
Nectarines and								
Peaches ..	7,350	12,109	1,726	1,805	1,036	76	4	24,106
Nuts ..	783	530	7	2,103	308	..	1	3,738
Pineapples ..	198	..	5,779	..	15	..	..	5,992
Pears ..	3,701	11,329	225	1,790	1,022	2,215	4	20,316
Plums and Prunes	5,388	4,394	1,260	2,571	1,125	545	7	15,290
Small fruits ..	24	801	143	421	71	2,707	..	4,167
Other fruits ..	1,785	3,609	1,902	993	612	91	2	8,994
Total ..	82,702	75,788	28,544	29,122	21,667	33,372	76	271,271

(iii) *Production.* (a) *Quantities.* The production in 1935-36 is shown in the next table:—
ORCHARDS AND FRUIT GARDENS.—PRODUCTION, 1935-36.

Fruit.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Federal Capital Territory.	Australia.
Apples .. bushel	977,901	2,417,425	249,998	939,240	1,235,849	3,050,000	877	9,771,290
Apricots ..	208,289	359,793	5,323	381,404	62,088	138,000	150	1,146,047
Bananas ..	1,609,789	..	1,733,378	..	24,313	..	..	3,367,480
Cherries ..	141,688	41,509	100	41,891	1,477	2,300	13	228,978
Citrus—								
Oranges ..	12,160,578	602,714	287,769	643,291	323,670	..	..	4,429,856
Mandarins ..	378,689	15,576						
Lemons ..	241,430	203,288						
Other ..	45,587	1,801						
Nectarines and								
Peaches ..	582,266	924,824	92,639	150,753	80,118	3,700	56	1,800,254
Nuts .. lb.	312,984	187,566	1,008	759,584	74,804	..	..	1,300,946
Pineapples .. dozen	33,428	..	1,333,415	..	841	..	..	1,335,284
Pears .. bushel	396,227	1,492,062	17,020	228,323	113,450	211,000	96	2,850,088
Plums and Prunes	300,542	213,417	63,712	157,515	84,018	86,000	132	1,005,334
Small Fruits .. cwt.	357	14,667	2,990	8,619	680	117,997	..	145,663

(b) *Values.* The value of production for the various classes of fruit for the year 1935-36 is given in the following table:—

ORCHARDS AND FRUIT GARDENS.—VALUE OF PRODUCTION, 1935-36.

Fruit.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Federal Capital Territory.	Australia.
	£	£	£	£	£	£	£	£
Apples ..	354,980	543,921	70,987	168,597	504,158	857,400	118	2,300,051
Apricots ..	92,320	83,313	2,575	107,200	29,880	30,300	60	345,088
Bananas ..	595,200	..	302,560	..	17,559	..	..	915,319
Cherries ..	86,070	30,094	110	25,135	2,805	1,400	..	115,622
Citrus—								
Oranges ..	604,870	200,895	105,623	227,049	129,470	..	..	1,301,103
Mandarins ..	110,910	5,062						
Lemons ..	72,700	5,465						
Other ..	18,050	585						
Nectarines and Peaches	224,330	231,057	39,345	47,546	45,381	1,100	23	581,381
Nuts ..	7,407	6,468	28	24,526	2,496	..	..	49,928
Pineapples ..	7,870	..	247,085	..	423	..	..	255,378
Pears ..	132,350	335,714	4,257	52,875	57,501	56,700	52	639,439
Plums and Prunes	118,010	38,007	5,313	37,771	23,177	12,000	47	208,666
Small Fruits ..	1,485	29,074	8,291	16,495	4,776	157,400	..	217,521
Other Fruits ..	49,048	85,324	40,409	15,620	16,621	800	10	207,847
Total ..	2,175,000	3,442,251	884,055	730,008	800,971	1,148,100	513	7,701,856

3. **Principal Fruit Crops.**—(i) *Area.* The area in Australia under the principal fruit crops for the year 1913-14 and for each of the last five years is shown hereunder :—

PRINCIPAL FRUIT CROPS.—AREA, BEARING AND NON-BEARING, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1913-14 ..	56,577	7,778	24,840	13,645	9,657	8,410
1931-32 ..	99,150	21,941	53,052	22,760	20,042	16,443
1932-33 ..	100,309	21,893	52,407	22,321	19,922	16,418
1933-34 ..	101,812	28,440	52,724	22,392	19,751	16,210
1934-35 ..	102,414	26,593	49,247	22,990	20,578	15,741
1935-36 ..	102,003	21,801	47,506	22,876	20,316	15,290

(ii) *Production*—(a) *Quantities.* In the next table the total production for the principal varieties of fruit grown in Australia is shown for the same periods :—

PRINCIPAL FRUIT CROPS.—PRODUCTION, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1913-14 ..	5,000,178	835,868	1,638,961	930,144	951,277	621,525
1931-32 ..	9,227,736	2,728,982	5,220,772	1,191,166	1,641,228	579,293
1932-33 ..	10,798,538	2,256,520	4,920,419	2,090,584	2,152,887	1,183,700
1933-34 ..	10,500,288	2,636,288	5,159,524	1,762,923	1,914,118	943,102
1934-35 ..	9,569,161	3,027,168	5,307,146	2,011,542	1,934,975	1,004,821
1935-36 ..	9,771,290	3,367,480	5,057,081	1,762,673	2,458,087	905,936

(b) *Values.* The value of the principal fruit crops during the periods mentioned is given in the subjoined table :—

PRINCIPAL FRUIT CROPS. VALUE OF PRODUCTION, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.
	£	£	£	£	£	£
1913-14 ..	1,132,427	157,710	719,808	306,433	258,235	135,654
1931-32 ..	2,320,629	809,401	1,650,315	446,211	428,707	223,959
1932-33 ..	2,266,713	907,820	1,528,067	699,296	504,634	327,172
1933-34 ..	2,249,108	1,013,812	1,540,767	455,021	465,875	243,549
1934-35 ..	2,581,568	900,657	1,444,203	572,643	499,937	269,626
1935-36 ..	2,500,361	915,409	1,575,662	554,094	639,429	268,669

4. **Imports and Exports of Fruit.**—(i) *General.* A considerable export trade in both fresh and dried fruits is carried on by Australia with overseas countries. The import trade in fresh fruits declined heavily during recent years owing to the imposition of a Customs duty of 1d. per lb. on imported bananas, which had previously been the chief variety of fresh fruit imported into Australia. Under the terms of the agreement reached at Ottawa in 1932, however, 40,000 cwt. of bananas may be admitted annually from Fiji at the rate of duty of 2s. 6d. per cwt. The imports of dried fruits at present consist mainly of dates. The export trade in fresh and dried fruits has expanded greatly during recent years, the value of the shipments in 1935-36 amounting to £1,000,880 and £1,987,492 respectively. Apples constitute the bulk of the fresh fruit exported, although the exports

of citrus fruits and pears are fairly considerable, and experiments are being conducted in regard to the dispatch of other fruits. Shipments of raisins and currants have increased greatly since 1934-35, and are mainly responsible for the growth in the dried fruits exports. Dried apricots also figure amongst the exports.

(ii) *Fresh Fruits.* Information with regard to the Australian overseas trade in fresh fruits is given hereunder :—

FRESH FRUITS.—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb.	£	lb.	£	lb.	£
1931-32 (a)	3,007,000	18,115	225,466,700	2,085,597	222,459,700	2,067,482
1932-33 (a)	5,186,400	34,462	275,080,400	2,417,982	269,894,000	2,383,520
1933-34 (a)	6,219,200	33,592	240,260,800	2,011,731	234,071,600	1,978,139
1934-35 (a)	4,224,300	26,247	233,300,000	1,777,331	229,075,700	1,751,084
1935-36 (a)	3,720,500	18,910	247,865,300	1,969,580	245,144,800	1,950,670

(a) Australian currency values.

(iii) *Exports of Apples, Pears and Citrus Fruits.* The quantity and value of apples, pears and citrus fruits exported during each of the last five years are shown in the following table :—

APPLES, PEARS AND CITRUS FRUITS.—EXPORTS, AUSTRALIA.

	Apples.		Pears.		Citrus Fruits.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cental.	£	Cental.	£	Cental.	£
1931-3	1,876,653	1,701,569	127,708	130,744	181,450	170,573
1932-3	2,273,724	1,951,994	283,397	262,134	136,183	123,809
1933-34	2,058,965	1,654,241	171,753	163,585	132,666	132,363
1934-35	1,745,337	1,307,791	254,078	240,830	242,891	212,135
1935-36	2,008,656	1,494,524	275,800	270,262	190,061	188,170

(iv) *Dried Fruits.* The quantity and value of overseas imports and exports of dried fruits, other than raisins and currants, for the last five years are shown below : about 95 per cent. of the total imports consisted of dates obtained almost entirely from Iraq :—

DRIED FRUITS(a).—IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb.	£	lb.	£	lb.	£
1931-32(b)	9,085,800	74,002	727,180	14,220	9,201,031	59,782
1932-33(b)	9,415,000	62,281	2,003,150	51,704	7,322,392	10,517
1933-34(b)	8,392,081	71,204	507,4830	151,573	2,027,538	— 79,979
1934-35(b)	13,187,250	94,093	5,507,100	134,426	7,680,150	— 39,523
1935-36(b)	11,912,272	85,590	4,144,611	110,423	7,767,661	— 23,833

(a) Excluding raisins and currants, referred to separately under Vineyards, § 15 par. 4.

(b) Australian currency values.

NOTE.—A minus sign (—) signifies net exports.

(v) *Jams and Jellies.* Jams and jellies were exported in large quantities during the war years, and in 1918 the record shipment of 79,277,560 lb., valued at £1,847,970, was dispatched from Australia. Since that year, however, the trade has dwindled, the value of the exports in 1935-36 amounting to only £132,886. Particulars relative to imports and exports during each of the last five years are as follows:—

JAMS AND JELLIES. IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb.	£	lb.	£	lb.	£
1931-32(a)	2,099	182	1,674,862	44,630	1,672,763	44,448
1932-33(a)	24,492	1,180	1,886,344	47,682	1,861,852	46,502
1933-34(a)	16,159	909	2,245,262	55,958	2,229,103	55,049
1934-35(a)	30,322	1,265	2,949,105	63,425	2,918,783	62,160
1935-36(a)	50,010	1,910	7,019,191	134,796	6,969,181	132,886

(a) Australian currency values.

(vi) *Preserved Fruit.* Details concerning the quantities and values of preserved fruit imported into Australia cannot readily be obtained, owing to the fact that in the Customs returns particulars concerning fruit and vegetables are in certain cases combined. The total value of fruit and vegetables preserved or partly preserved in liquid, or pulped, imported into Australia during 1935-36 was £32,110, or £40,218 in Australian currency. Overseas exports in 1935-36 were as follows—Apricots, 7,773,122 lb., £132,245; peaches, 24,036,382 lb., £362,620; pears, 13,953,638 lb., £232,338; pineapples, 1,754,950 lb., £32,056; and other, 2,053,560 lb., £46,619; or a total shipment valued at £805,887.

§ 17. Minor Crops.

1. *General.* In addition to the crops previously dealt with, there are many others which, owing either to their nature, or to the fact that their cultivation has advanced but little beyond the experimental stage, do not occupy so prominent a position. Some of the more important of these are included under the headings—Market Gardens, Pumpkins and Melons, Nurseries, Grass Seed, Tobacco and Millet. Cotton growing has received considerable attention in the tropical portions of Queensland, and the prospects of establishing this industry are hopeful. The total area in Australia during the season 1935-36 devoted to crops not dealt with in previous sections was 203,258 acres, the major portion of which consisted of cotton, market gardens, grass seed, pumpkins and melons, and tobacco.

2. *Market Gardens.*—Under this head are included all areas on which mixed vegetables are grown. Where considerable areas are devoted to the production of one vegetable, such for instance as the potato, the onion, the melon, the tomato, etc., the figures are usually not included with market gardens, but are shown either under some specific head, or under some general head as "Other Root Crops," or "All Other Crops." The area under market gardens during each of the last five seasons is given hereunder:—

MARKET GARDENS.—AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1931-32 ..	6,655	19,786	778	1,726	3,123	660	33	32,761
1932-33 ..	6,047	18,249	992	1,896	3,807	804	55	31,850
1933-34 ..	5,664	20,010	833	2,105	3,281	779	61	32,733
1934-35 ..	6,090	20,728	801	1,994	3,024	869	13	34,125
1935-36 ..	7,026	20,633	950	1,555	3,074	812	52	34,102

3. **Grass Seed.**—The area under this crop during 1935-36, exclusive of New South Wales and Western Australia, for which States complete figures as to area are not available, was 24,130 acres, of which 8,222 acres were in Victoria, 1,668 acres in Tasmania, 7,720 acres in Queensland, and 6,520 acres in South Australia. The production for 1935-36 for these States was 270,931 bushels. In addition to the areas planted above, there were 9,438 acres sown to canary seed in Queensland, 1,030 acres in Victoria and 156 acres in New South Wales, returning a yield of 61,335 bushels, valued at £44,133.

4. **Tobacco.**—Tobacco growing some years ago promised to occupy an important place amongst the agricultural industries of Australia. Thus, as early as the season 1888-89, the area under this crop amounted to 6,641 acres, of which 4,833 were in New South Wales, 1,685 in Victoria, and 123 in Queensland. This promise was, however, not fulfilled, and after numerous fluctuations, in the course of which the Victorian area rose in 1895 to over 2,000 acres, and that in Queensland to over 1,000 acres, the total area declined considerably.

In all the States in which its cultivation has been tried, the soil and climate appear to be suitable for the growth of the plant, and the large import of tobacco in its various forms is an index of the market for a satisfactory product. The net imports of tobacco into Australia during the year 1935-36 were valued at £A.1,792,544, while the net quantity of unmanufactured tobacco imported was 19,532,586 lb. valued at £A.1,931,281. The area under this crop in 1935-36 amounted to 10,538 acres which produced 5.6 million lb. Victoria with 5,840 acres and Queensland with 3,117 acres were the chief producing States.

It has been proved that suitable leaf can be grown, and efforts are now being directed to the elimination of disease, and to improvement in the quality and aroma of the finished product. As the result of an agreement with the Commonwealth Government, the Australian Tobacco Manufacturers agreed to purchase in 1931-32, 7.2 million lb. of suitable leaf at an average price of 2s. 3d. per lb.; actually more than 10.5 million lb. was purchased at an average of 2s. 1½d. per lb. The agreement was not renewed and the area declined from 26,272 acres in 1932-33 to 10,538 acres in 1935-36.

The following table furnishes details of the average area, production, etc., in quinquennial periods from 1901 to 1935, and annually from 1931-32 to 1935-36:—

TOBACCO.—AREA, PRODUCTION, ETC., AUSTRALIA.

Period.				Area.	Production.	Value.	Number of Producers Registered.
				Acres.	lb.	£	No.
1901-05	..	..	..	1,412	1,172,976	(a)	387
1906-10	..	..	..	1,678	1,419,040	41,581	518
1911-15	..	..	..	2,496	2,106,160	65,615	479
1916-20	..	..	..	1,648	1,449,616	104,978	487
1921-25	..	..	..	2,677	1,962,576	158,748	925
1926-30	..	..	..	2,478	1,632,243	121,589	666
1931-35	..	..	..	15,856	6,580,566	631,038	..
1931-32	..	..	..	17,738	10,160,192	1,114,737	2,774
1932-33	..	..	..	26,272	9,723,056	960,565	5,527
1933-34	..	..	..	16,304	4,348,964	339,663	5,081
1934-35	..	..	..	8,410	3,113,315	257,755	4,205
1935-36	..	..	..	10,538	5,557,304	483,571	3,501

(a) Not available.

In 1920 a Select Committee was appointed by the House of Representatives to report on the tobacco industry in Australia. The report of the Committee was submitted on 1st July, 1930, and among the recommendations made was one for the formation of a Tobacco Investigation Committee. This Committee was formed, and was financed jointly by the Commonwealth Government and the British Australian Tobacco Company, the Company undertaking to contribute up to £3,000 on the £ for £ basis. In 1933 another Committee was appointed. The recommendation of this Committee, which

reported on 16th November, 1933 that the sum of £20,000 should be provided annually for five years to assist the States to continue economic and scientific investigations, was adopted and this amount has been included in the Budget for each year since 1933-34. £5,000 was allotted to the Council for Scientific and Industrial Research, and the balance was distributed among the States to provide additional services, £3,750 being allocated to each of the States of New South Wales, Victoria and Queensland, and £1,250 each to South Australia, Western Australia and Tasmania. The Council for Scientific and Industrial Research is investigating diseases affecting the tobacco plant, including work on disease resisting varieties, and is making tests of smoking quality. The Council has been successful in discovering effective means of preventing blue mould, and consequently the development of the industry should proceed on much sounder lines than hitherto. The States are carrying out field investigations of disease resistance, selection, yield and quality improvement, and are conducting instructional, demonstrational and field experimental work.

5. Pumpkins and Melons.—The total area under this crop in Australia during 1935-36 was 20,421 acres, of which 4,611 acres were in New South Wales, 1,246 acres in Victoria, 13,517 acres in Queensland, 322 acres in South Australia, and 698 acres in Western Australia. The production for Australia amounted to 61,656 tons.

6. Hops.—Hop growing in Australia is practically confined to Tasmania and some of the cooler districts of Victoria, the total area for the season 1935-36 being 1,017 acres, of which 882 acres were in Tasmania, 123 acres in Victoria and a small area of 12 acres in Western Australia. The Tasmanian area, though still small, has increased during the past 33 years, the total for the season 1901-2 being 599 acres. In Victoria the area, which in 1901-2 was 307 acres, dwindled to 71 acres in 1918-19, then rose to 312 acres in 1925-26 and dropped to 123 in 1935-36. The cultivation of hops was much more extensive in Victoria some 50 years ago than at present, the area in 1883-84 being 1,758 acres. During the year 1935-36 the imports of hops exceeded the exports by 85,720 lb., valued at £A.6,577, of which New Zealand supplied 82,534 lb. The value of the production in Australia in 1935-36 amounted to £151,112.

7. Flax.—For many years flax was grown intermittently in the Gippsland district of Victoria, and attempts were made to introduce its cultivation into Tasmania and New South Wales, but without success. About the end of the year 1917 the shortage of flax fibre was acute, and endeavours were made by the Commonwealth Government to encourage local cultivation. The acreage in Victoria increased from 419 acres in 1917-18 to 1,611 acres in 1919-20, but fell to 179 acres in 1928-29. As the result of a bounty introduced in 1930 the area increased to 1,216 acres in 1930-31, but this expansion was not maintained during the following years. In 1935-36, however, 1,008 acres were planted in this State compared with 584 acres in the previous year.

The linseed-flax industry has been the subject of two investigations during recent years. In 1933, the Development Branch of the Prime Minister's Department examined the industry and recommended in its report that any aggressive policy of expansion should be avoided. A second investigation was made under the direction of the Council for Scientific and Industrial Research in 1936. The report issued in that year indicated the possibility of developing the flax industry in Australia and that further investigation and experiment appeared to be justified. A special vegetable fibre section of the Council was established to carry out further studies of the problem. Largely as a result of the efforts of the Council, private enterprise is again attempting the development of the industry in Victoria.

Bounty was paid on flax and linseed grown in Australia between the years 1907 and 1918 and again for a period of five years ending 28th February, 1935. During these periods the total amounts disbursed as bounty were £2,376 and £2,839 respectively.

8. Millet.—Millet figures in the statistical returns of three of the States. The total area devoted thereto in 1935-36 was 2,416 acres, of which 1,652 acres were in New South Wales, 635 in Victoria, and 129 in Queensland. The particulars here given relate to millet grown for grain and fibre, the quantity for green forage being dealt with in the section relating thereto.

9. *Nurseries*.—In all the States fairly large areas are occupied as nurseries, but figures in regard to acreages under flowers, fruit trees, etc., are available only for New South Wales, Victoria, South Australia and Western Australia. During 1935-36 the areas in those States were 858, 1,036, 158 and 160 acres respectively.

10. *Cotton*.—The cultivation of cotton was begun in Queensland in 1860, and ten years later the area cropped had increased from 14 acres to over 14,000 acres. The reappearance of American cotton in the European market on the conclusion of the Civil War gave a severe setback to the new industry, and the area declined continuously till 1888, when only 37 acres were planted. Later on the industry was resuscitated, and manufacturing on a small scale was undertaken on two separate occasions at Ipswich, but low prices over a term of years checked development. In 1913 the Queensland Government made an advance of 1½d. per lb. on seed cotton, and ginned it on owner's account, the final return being equal to about 1½d. per lb. The rise in price enabled the Government to offer a guarantee of 5½d. per lb. for seeded cotton of good quality for the three years ended 31st July, 1923, and the area picked increased from 166 acres in 1920 to 50,186 acres in 1924. Guarantees were continued until 1926, when the Commonwealth Government granted a bounty of 1½d. per lb. on the better grades and ¾d. on the lower grades of seed cotton grown in Australia. In addition to this direct assistance to the growers the Government subsidized the cotton-manufacturing industry by granting a graduated bounty, varying from ½d. to 1s. per lb., on all cotton yarn manufactured in Australia which contained 50 per cent. of home-grown cotton. This bounty, however, ceased to operate after 30th June, 1932. The Raw Cotton Bounty Act of 1934, which repealed the previous Acts, provided, *inter alia*, that a bounty of 5½d. per lb., fluctuating according to variations in the Liverpool price, shall be payable on raw cotton produced in Australia from Australian grown seed. The amount of raw cotton for the purpose of the bounty was limited to the requirements of Australia plus 20 per cent. With the change over to the bounty system, a cotton pool was formed in Queensland under the Primary Products Pools Act, and a Cotton Board was elected to control the handling, financing and marketing of all cotton grown in the State.

The area under cultivation and the production in Queensland since the year 1926 are shown hereunder:—

COTTON.—AREA AND PRODUCTION, QUEENSLAND.

Year.						Area.	Yield of Unginned Cotton.
						Acres.	Lb.
1926	..	..	..	..	..	18,743	9,059,907
1927	..	..	..	..	..	14,975	7,060,756
1928	..	..	..	..	..	20,316	12,290,910
1929	..	..	..	..	..	15,003	8,024,502
1930	..	..	..	..	..	22,652	17,022,897
1931	..	..	..	..	..	22,452	15,244,644
1932	..	..	..	..	..	20,995	6,270,116
1933	..	..	..	..	..	68,203	17,718,306
1934	..	..	..	..	..	43,397	26,924,179
1935	..	..	..	..	..	54,947	20,785,418

11. *Coffee*.—Queensland is the only State in which coffee has been grown to any extent, and the results have not been satisfactory. The area under crop reached its highest point in the season 1901-2 with 547 acres. Thereafter the acreage fluctuated, but on the whole with a downward tendency, and in 1935-36 only 14 acres were recorded with a production of 6,210 lb.

12. *Other Crops*.—Miscellaneous small crops grown in Australia include tomatoes, rhubarb, artichokes, arrowroot, chicory and flowers.

§ 18. Bounties.

1. Bounties.—The bounties paid by the Commonwealth Government during the year ended 30th June, 1937, amounted to £477,471. This amount refers only to bounties paid under the Bounties Acts and does not include financial assistance given to wheat-growers and other primary producers under other Acts. Particulars of the assistance so rendered by the Commonwealth Government are furnished hereafter. Details of the amounts paid as bounty during the years 1932-33 to 1936-37 are as follows:—

BOUNTIES.—AUSTRALIA.

Articles on which Bounty was Paid.	Rate of Bounty Payable(a).	Date of Expiry of Bounty.	Amount Paid.				
			1932-33.	1933-34	1934-35	1935-36	1936-37.
Iron and Steel Products			£	£	£	£	£
Bounty Act—							
•Fencing Wire ..	£2 12s. per ton (d) ..	(e) 6th Nov., 1930	..	..	..	..	..
•Galvanized Sheets ..	£2 12s. per ton (b) ..	(e) 27th Mar., 1931	..	..	..	..	..
•Wire Netting ..	£3 8s. per ton (c) ..	..	8,947	9,838	10,644	10,659	8,467
•Traction Engines ..	According to capacity, £40-£90 per tractor less 10 per cent. from 9th July, 1930, increased to 16 per cent. from 7th November, 1930, and to 40% from 11th July, 1931. Restored to original rate from 4th December, 1933	..	894	5,152	6,192	9,814	20,503
• Manufactured from Materials produced and manufactured in Australia							
Sulphur Bounty Act—							
Sulphur from Australian Pyrites and other Sulphide Ores or Concentrates	£2 5s. per ton ..	..	46,245	47,955	50,831	74,281	68,011
Flax and Linseed Bounties Act 1930	Rates vary according to year	28th Feb., 1935	412	205	399	62	..
Wine Export Bounty Act 1934-35—							
Fortified Wine, containing not less than 34 per centum of proof spirit, exported from Australia from 1st March, 1935, to 29th February, 1940	1s. 3d. per gallon from 1st March, 1935, to 28th February, 1937, reduced by 1d. per annum from 1938 to 1s. per gallon in 1940.	29th Feb., 1940	178,491	183,981	184,330	194,467	214,886

(a) All bounties are subject to 20 per cent. reduction from 20th July, 1931, excepting those paid on gold, wine, wheat, and fruit exported. (b) Amount of Bounty raised to £3 10s. per ton on 1st January, 1930; reduced to £3 10s. per ton on 1st June, 1930; and to £2 10s. per ton on 27th March, 1931, owing to increase in Customs duty. (c) Amount of Bounty reduced to £2 14s. per ton on 10th July, 1930; to £2 5s. 6d. per ton on 7th November, 1930; and to 12s. per ton from 1st July, 1931. (d) Amount of Bounty reduced to £2 6s. on 10th July, 1930. Bounty ceased on 6th November, 1930, owing to increase in Customs duty. (e) Date Bounty ceased.

BOUNTIES.—AUSTRALIA—*continued.*

Articles on which Bounty was paid.	Rate of Bounty Payable. (c)	Date of Expiry of Bounty.	Amount Paid.				
			1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Cotton Bounty Act— Seed Cotton grown in Australia and delivered and graded as prescribed	Varies on Higher Grades from 1½d. per lb. up to 1932, to ½d. per lb. in 1936	30th Sept., 1936	£ 56,182	£ 87,268	£ 21,729	£ ..	£ ..
"	Varies on Lower Grades from ½d. per lb. up to 1932, to ¼d. per lb. in 1936						
Cotton Yarn manufactured in Australia	Varies according to count and year	(e) 30th June, 1932	36,985	2,287	..	..	..
Raw Cotton Bounty Act— Raw cotton produced in Australia and graded as prescribed	5½d. per lb. to 30th November, 1935, 4½d. to 30th November, 1936, and 4½d. per lb. to 30th November, 1939, fluctuating according to variations in Liverpool price	30th Nov., 1939	..	..	96,752	77,089	50,643
Papua and New Guinea Bounties Act— Cocoa and Coffee Beans (a) produced in these Territories imported into Australia for home consumption	1½d. per lb. ..	31st Dec., 1937	(b) 632	(b) 844	1,430	1,166	1,285
Gold Bounty Act— Gold produced in Australia as prescribed	Varies according to production (d)	(e) 30th Sept., 1932	96,112	1,216	..	..	..
Wheat Bounty Act—(g) Wheat harvested in Australia during the period 1st October, 1931, and 31st March, 1932, and sold or delivered for sale between 1st October, 1931, and 31st October, 1932, as prescribed	4½d. per bushel ..	31st Oct., 1932	132,807 (f)	(f)	(f)	(f)	(f)
Fruit Exported— Oranges	6d. per case .. 2s. per export case ..	(h) (h) (h)	.. .. ..	.. .. ..	5,227 .. ..	.. 7,886 ..	.. .. 7,431
Apples and Pears ..	4d. per bushel case .. 4½d. " " " ..	(h) (h) (h)	.. .. ..	.. .. ..	.. .. ..	81,047 .. ..	.. 104,045 ..
Prunes	½d. per lb. " " .. ½d. " " " ..	(h) (h) (h)	.. .. ..	.. .. ..	.. .. ..	6,707 .. ..	.. 2,200 ..
Total .. ..	.. ..	..	557,707	338,746	377,734	463,179	477,471

(a) Other goods are scheduled in the Act, *see* Note (b). (b) Including 17s. 2d., being amount of bounty paid on 172 lb. of spices in 1932-33; and £13 on 2,007 lb. of kapok in 1933-34. (c) All Bounties are subject to 20 per cent. reduction from 20th July, 1931, excepting those paid on gold, wine, wheat, and fruit exported. (d) Rate of Bounty on gold produced for the nine months ending September, 1932, was 4.05cs. per fine ounce. (e) Date Bounty ceased. (f) For details of other financial assistance *see* next table. (g) Includes Administrative expenses amounting to £14,087. (h) Acts passed in respect of each year.

2. Other Financial Assistance.—In addition to the payment of bounties mentioned in the preceding paragraph financial assistance has been granted by the Commonwealth Government for the relief of wheat-growers, fruit-growers and other primary producers. The amounts shown, however, do not include such items as the expenditure on cattle tick control, banana industry, tobacco investigation and apple and pear research, which indirectly benefits the industries concerned. The distribution as bounty, relief or subsidy has been made in the following manner:—

AMOUNTS PAID BY THE COMMONWEALTH GOVERNMENT TO ASSIST PRIMARY PRODUCERS.—AUSTRALIA.

Amounts paid to—	Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Total.
		£	£	£	£	£	£	£	£
Wheat-growers as—									
Bounty (a) ..	1931-32	950,546	820,635	64,620	874,630	716,826	2,057	..	3,429,314
Relief ..	1932-33	570,902	442,421	40,744	507,138	436,145	2,342	308	2,000,000
Relief ..	1932-34	311,094	603,836	7,415	76,435	639,493	(d) 57,044	505	3,053,000
Bounty (a) ..	1934-35	531,593	285,000	45,717	300,687	296,652	2,543	222	1,462,414
Special Relief ..	1934-35	100,000	192,000	12,000	127,000	137,000	5,250	..	573,250
Relief ..	1934-35	590,000	400,000	42,740	503,545	434,527	(d) 33,906	226	2,004,944
Relief (b) ..	1935-36	565,327	441,948	42,835	432,146	392,850	(d) 40,403	360	1,915,869
Total ..	..	4,219,462	3,185,590	325,111	3,509,689	3,053,493	143,525	1,921	14,438,791
Fruit-growers as—									
Relief (c) ..	1933-34	8,225	36,321	478	5,258	10,918	63,800	..	125,000
Relief (c) ..	1934-35	12,538	22,299	2,103	13,116	14,713	70,231	..	135,000
Total ..	..	20,763	58,620	2,581	18,374	25,631	134,031	..	260,000
Primary Producers (other than wheat-growers)—									
Manure subsidy ..	1932-33	19,093	88,697	32,588	34,930	50,823	17,711	..	244,652
Manure subsidy ..	1934-35	23,000	95,000	21,000	46,000	52,000	13,000	..	250,000
Manure subsidy ..	1935-36	56,211	203,324	40,944	99,610	105,821	28,127	..	534,937
Manure subsidy (b) ..	1936-37	43,000	132,000	22,000	59,000	55,000	16,000	..	327,000
Total ..	..	142,114	519,021	116,532	239,540	263,644	74,838	..	1,355,689
Grand Total..	..	4,382,339	3,763,231	444,224	3,767,603	3,342,768	352,394	1,921	16,054,480

(a) Rate of Bounty 4½d. per bushel in 1931-32 and 3d. per bushel in 1934-35. (b) Subject to revision.
(c) Growers of apples, pears and mandarins. (d) Includes special grant to Tasmania

The moneys granted for the assistance of wheat-growers in 1932-33 and 1933-34 were paid through the Governments of the States on an acreage basis. In 1934-35, in accordance with the recommendations of the Royal Commission on the wheat industry, assistance took the form of a bounty of 3d. per bushel, supplemented by a further relief payment of 3s. per acre. Further special relief was given to those farmers who were adversely affected by the weather conditions of the season 1934-35. Altogether, the amount paid during 1934-35 for the benefit of wheat-growers exceeded £4 million. For the year 1935-36 the amount paid by the Commonwealth Government as relief was £1,915,869. This also was paid through the State Governments. The relief granted to fruit-growers was paid to growers of apples, pears and mandarins. Assistance has been given to primary producers, other than wheat-growers, in the form of a manure subsidy; the rate was 15s. for each ton of artificial manure used in the production of primary produce, reduced in 1936-37 to 10s. per ton. Since 1932-33 more than £1,355,000 has been distributed in this manner. In addition to the assistance outlined above, the Loan (Farmers' Debt Adjustment) Act 1935 made provision for grants totalling £12 million to be made available to the States for the adjustment of farmers' debts. Of this amount

£10 million was allocated as follows:—New South Wales, £3,450,000; Victoria, £2,500,000; Queensland, £1,150,000; South Australia, £1,300,000; Western Australia, £1,300,000; and Tasmania, £300,000. The remaining £2 million is to be allocated in the same proportion, but is subject to review at a later date.

§ 19. Fertilizers.

1. General.—In the early days of settlement in Australia scientific cultivation was little understood. It was common, as in other new countries, for the land to be cropped continuously to a degree of exhaustion. The divergent character of the soils presented a difficulty in the proper use of fertilizers for different crops and the outstanding development of wheat-growing made a system of crop rotation impracticable. The importance of fallowing and the application of suitable fertilizers in adequate quantities is, however, now widely appreciated by farmers. The introduction of the modern seed-drill acting also as a fertilizer-distributor has greatly facilitated the use of artificial manures, and much land formerly regarded as useless for cultivation has now been made productive.

2. Fertilizers Acts.—In order to protect the users of artificial manures, legislation has been passed in each of the States regulating the sale and promoting the dissemination of fertilizers. A list of these Acts and their main features will be found in Official Year Book No. 12 (page 378).

3. Imports.—The Australian production of prepared fertilizers is sufficient for local requirements. Imports consist chiefly of rock phosphate, which is used in making superphosphate, a valuable fertilizer for cereals. During 1935-36 the value of rock phosphate imported represented more than 67 per cent. of the total imports of fertilizers. Nauru and Gilbert and Ellice Islands Colony supplied the whole of the shipments. Sodium nitrate is obtained chiefly from Chile.

The imports of manures during the last five years are given in the following table. Although considerable quantities of manufactured superphosphate were imported up to the year 1914-15, imports during recent years were very small:—

FERTILIZERS.—IMPORTS, AUSTRALIA.

Fertilizer.		1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)
Ammonium Sulphate	cwt.	89,050	314,798	305,972	229,200	491,208
„ „	£	37,847	100,926	127,015	104,809	216,671
Potash Salts	cwt.	108,793	145,209	124,871	149,701	209,379
„ „	£	61,313	98,767	60,290	59,841	75,120
Rock Phosphate	cwt.	5,948,490	9,569,006	7,480,378	8,201,296	10,488,165
„ „	£	463,496	731,454	593,971	610,092	735,902
Soda Nitrate	cwt.	13,041	64,388	59,534	83,548	110,273
„ „	£	8,052	40,004	30,899	39,431	49,580
Superphosphate	cwt.	..	..	..	51,360	40
„ „	£	..	..	..	3,449	9
Other	cwt.	6,049	7,787	120,382	7,712	116,549
„ „	£	4,025	3,808	20,313	3,431	13,598
Total	cwt.	6,165,423	10,101,188	8,091,137	8,722,817	11,415,614
	£	574,733	981,559	838,488	821,053	1,090,940

(a) Austral an currency values.

4. Exports.—The subjoined table shows the exports of manures for the years 1931-32 to 1935-36. Practically all these fertilizers are manufactured locally, the quantities exported being consigned chiefly to the Pacific Islands, New Zealand and Japan:—

FERTILIZERS.—EXPORTS, AUSTRALIA.

Fertilizer.		1931-32	1932-33.	1933-34.	1934-35.	1935-36.
Ammonia sulphate	cwt.	1,715	1,035	279	2,553	4,061
" "	£	546	423	121	1,074	1,569
Bonedust	cwt.	1,140	5,470	25	41	2,576
" "	£	162	770	10	17	1,396
Rock phosphate	cwt.	..	..	..	..	..
" "	£
Soda nitrate	cwt.	88	65	6	1	..
" "	£	69	49	7	1	..
Superphosphate	cwt.	66	294	633	31,116	36,454
" "	£	28	89	155	5,590	6,261
Other	cwt.	41,300	11,811	27,445	18,188	29,300
" "	£	11,453	1,664	8,493	1,703	11,665
Total		44,408	18,675	22,388	51,890	72,391
		£ 12,258	2,995	8,786	8,385	20,891

5. Quantities Locally Used.—Information regarding the area manured and the quantity used in each State during the year 1935-36 is given in the following table. Hitherto the area of pasture lands top-dressed and the quantity of manure used thereon were not available separately for Victoria and Western Australia, the particulars being included with the area of crops manured. The particulars are now available and the table has been extended to include these additional data for the year 1935-36. Details of the area manured with natural manure (stableyard, etc.) have been omitted; in 1935-36 the area and quantity involved amounted to 104,558 acres and 511,580 loads:—

AREA MANURED AND QUANTITY OF MANURE USED, 1935-36.

State or Territory.	Artificial Manure (Superphosphates, Bonedust, Nitrates, etc.).				Total Area Manured.	Total Artificial Manure Used.
	Area under Crop Manured.		Pasture Lands Top-dressed.			
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
New South Wales	3,557,512	106,736	351,209	16,736	3,908,721	123,472
Victoria	3,335,249	146,710	2,048,389	105,157	5,503,038	251,807
Queensland	162,734	40,393	(a)	(a)	^{b)} 162,734	^(d) 40,393
South Australia	3,995,165	147,851	535,090	26,730	4,441,155	174,593
Western Australia .. .	3,620,141	163,001	708,031	38,721	4,388,472	202,325
Tasmania	106,095	19,180	148,874	7,921	314,969	27,104
Northern Territory .. .	20	2	..	..	20	2
Federal Capital Territory ..	3,515	150	271	16	3,810	166
Total	14,990,761	621,056	3,852,764	195,290	18,843,525	810,952

(a) Not available.

(b) Excluding Pasture Lands. Quantity considered to be negligible.

Particulars of the quantity of artificial manure used in each of the States and Territories during the past ten years are included in the next table. These details include the quantity used in the top-dressing of pasture lands except where indicated by the

footnote. The omission of Queensland, however, does not detract from the value of the table as the area involved is considered to be negligible :—

QUANTITY OF ARTIFICIAL MANURE USED—AUSTRALIA.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Federal Capital Territory.	Total. (b)
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1926-27 ..	(a) 94,003	214,234	(a) 19,019	146,910	145,795	(a) 21,933	10	45	641,610
1927-28 ..	113,705	240,715	(a) 21,855	168,576	169,552	24,127	..	33	738,923
1928-29 ..	126,946	257,498	(a) 36,644	184,994	201,022	23,500	14	116	830,734
1929-30 ..	129,076	269,967	(a) 22,925	196,746	231,128	24,810	..	137	874,780
1930-31 ..	132,619	274,420	(a) 28,783	205,110	236,146	24,870	..	131	902,079
1931-32 ..	70,374	163,234	(a) 31,255	148,707	178,500	22,050	..	92	614,221
1932-33 ..	89,955	199,557	(a) 35,505	157,995	199,337	24,235	..	128	706,712
1933-34 ..	98,313	217,251	(a) 42,517	158,989	203,848	25,844	..	120	746,882
1934-35 ..	101,885	211,657	(a) 44,279	157,189	196,741	25,824	..	135	737,710
1935-36 ..	123,472	251,807	(a) 40,393	174,593	202,325	27,104	2	166	819,952

(a) Exclusive of quantity used in top-dressing pasture lands.

(b) Incomplete. See Note (a).

As mentioned in § 18 the Commonwealth Government has encouraged the use of artificial manure by subsidizing primary producers, other than wheat-growers, at the rate of 15s. per ton up to 1936-37 when it was reduced to 10s. per ton. The expansion in the use of artificial manure since 1932-33, when the subsidy was introduced, is indicated in the table above.

6. Local Production.—Complete information regarding local production of fertilizers is not available. The number of firms engaged in the manufacture of chemical fertilizers in Australia for the year 1935-36 was 33, made up as follows :—New South Wales, 4; Victoria, 5; Queensland, 5; South Australia, 7; Western Australia, 5; and Tasmania, 7. The production of superphosphates in Australia during 1935-36 amounted to 784,825 tons, the largest producing States being Victoria, Western Australia and South Australia.

§ 20. Ensilage.

1. Government Assistance in Production.—The various State Governments devote a considerable amount of attention to the education of the farming community in regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connexion with the design of the silos and the cutting and packing of the silage.

2. Quantity Made.—Information regarding the number of holdings on which ensilage was made and the quantity made during the seasons 1931-32 to 1935-36 is given in the following table.

ENSILAGE MADE.

	1931-32.		1932-33.		1933-34.		1934-35.		1935-36.	
State.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.
	(a)		(a)		(a)		(a)		(a)	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
New South Wales ..	628	54,885	738	62,435	892	70,835	1,068	88,991	1,311	109,731
Victoria ..	96	5,792	197	11,642	214	11,900	399	22,145	326	22,346
Queensland ..	79	5,819	112	6,305	134	8,515	105	7,566	86	5,644
South Australia ..	92	5,640	132	9,470	92	5,098	109	6,794	124	9,160
Western Australia ..	396	16,999	469	21,655	433	19,974	423	16,996	332	14,896
Tasmania ..	23	687	37	1,336	58	2,301	52	2,473	29	1,341
Australia ..	1,314	80,822	1,687	112,843	1,823	118,623	2,126	144,965	2,208	163,118

(a) No. of holdings on which ensilage was made.

The drought of 1902-3 drew increased attention to the value of stocks of ensilage and during the four seasons ended 1909-10 there was an increase both in the number of holdings on which ensilage was made and in the quantity produced. The following five seasons, however, showed a falling off, but the reduction was due to the fact that stocks had not been drawn upon to any great extent during the previous seasons. The

accumulated stocks proved of great value during the 1914 drought, though far below what would have been the case if more attention had been paid to production during the previous years, when there was a surplus of green forage. The quantities made since that date have fluctuated considerably, but the output has increased during recent years, the production of 163,118 tons in 1935-36 being the greatest yet recorded in any year.

§ 21. Agricultural Colleges and Experimental Farms.

1. *General.*—In most of the States agricultural colleges and experimental farms have been established with a view to the promotion of more scientific methods in agriculture, stock-breeding and dairying. In the colleges, and on some of the farms, provision is made for the accommodation of pupils to whom both practical and theoretical instruction is given by experts in various branches of agriculture. Analyses of soils and fertilizers are made, manures are tested, and elementary veterinary science, etc., are taught, while general experimental work is carried on with cereal and other crops, not merely for the purpose of showing that it is practicable to produce certain crops in a given place, but to show also how it is possible to make farming pay in the locality. Opportunities are afforded for practice in general agricultural work, and instruction is given in the conservation of fodder; in cheese and butter making; in the management, breeding and preparation for the market of live stock; in the eradication of pests and weeds; and in carpentering, blacksmithing and other trades.

Expert lecturers visit the various agricultural and dairying centres, and there is a wide distribution of periodical agricultural gazettes and bulletins.

2. *Agricultural Colleges and Experimental Farms.*—In previous issues of this volume detailed information was given regarding agricultural colleges, experimental farms and agricultural education generally. See Year Book No. 11, pages 393-5, and a summary in respect of the year 1935-36 will be found in the Production Bulletin No. 30 issued by this Bureau.

3. *Agricultural and Stock Departments.*—A synopsis of the activities and operations of the Agricultural and Stock Departments of the several States on 30th June, 1920, will be found in Official Year Book No. 14, pages 1180 to 1191.

§ 22. Employment in Agriculture.

Information relating to the number of persons employed is furnished annually by landholders of one acre and upwards. The particulars furnished refer to the owner, occupier or manager, those members of his family and other employees who are permanently engaged throughout the year in the work of the farm. Casual labour, such as harvesters and fruitpickers, is excluded. In the collection of statistics of this nature difficulty is experienced in correctly determining whether the duties of female employees are more domestic than rural and on that account it is considered advisable to leave females out of the table.

MALES EMPLOYED IN AGRICULTURE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
1913-14 ..	61,525	51,932	33,362	34,111	18,210	11,780	210,920
1923-24 ..	48,176	49,740	38,186	31,532	22,153	12,005	202,802
1931-32 ..	39,382	40,994	45,496	30,587	25,576	12,736	194,771
1932-33 ..	42,550	41,845	46,203	30,457	26,070	13,100	200,330
1933-34 ..	42,084	38,514	46,097	30,329	24,925	13,945	195,894
1934-35 ..	42,135	37,294	47,242	30,177	23,775	13,353	193,976
1935-36 ..	42,204	35,926	45,878	30,096	22,585	12,731	189,420

Although the area under crop has expanded considerably during the past two decades there has been a decrease in the numbers employed in the agricultural branch of the rural industry owing to the increasing use of machinery in the cultivation of the soil and the harvesting of the crops. For a number of years prior to the depression the value of machinery employed in agricultural pursuits increased on the average by approximately £2 million per annum. After 1920-30 machinery values declined each year until 1935-36, when an increase of £1½ million was recorded.

CHAPTER XXI.

FARMYARD, DAIRY AND BEE PRODUCTS.

§ 1. Introductory.

1. *Général.*—The introduction of cattle into Australia and the early history of the dairying industry are referred to in some detail in earlier issues of this work (see Official Year Book No. 6, p. 430). It may here be noted that the original stock has been crossed with specially imported stud cattle, while further judicious crossings of strains have resulted in an increased and improved milk supply. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter, and rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the wider application of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. An investigation into the problems of the dairying industry was instituted by the Commonwealth Government in 1929, and the first report, which relates to farm production, was completed in 1930. It was proposed to issue additional reports, but the investigation was discontinued. Investigation by the British Medical Research Council into the vitamin content of Australian, New Zealand and British butter respectively showed high and uniform results for the Australian product, the figures being on a par with those for the United Kingdom and other European countries. It was demonstrated also that Australian production and marketing methods do not adversely affect the vitamin content of the butter and that the loss during cold storage even for as long as two years is insignificant.

2. *Official Supervision of Industry.*—Dairy experts of the various State Agricultural Departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce. A high standard of cleanliness, both of *personnel* and *matériel*, prevails. Financial assistance of a temporary nature is also given.

The export trade is regulated by the terms of the Commonwealth Commerce Act 1905 and regulations thereunder. The provisions of this Act are set out in detail in Official Year Book No. 6, pp. 431-2. It will be sufficient to state here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

3. *Stabilization Scheme.*—(i) *Voluntary Plan.* During the period from January, 1926 to May, 1934, a voluntary scheme known as the "Paterson Plan" was in operation, and had the effect of stabilizing the price of butter in Australia. The scheme provided for the payment of a levy on all butter produced in Australia sufficient to pay a bounty on export which ranged from 3d. to 4½d. per lb. The local price was raised by the amount of the bounty per unit while the return to the producer on all butter produced was increased by approximately the difference between the rate of bounty paid and the rate of levy charged.

The scheme, however, did not receive the full support of all manufacturers of butter and was superseded by a system of compulsory control of sales.

(ii) *Compulsory Plan.* Legislation known as the Dairy Produce Act was passed by the Commonwealth Parliament towards the end of 1933, and at the same time complementary legislation was passed by the States of New South Wales, Victoria, Queensland and Tasmania. In the latter State, however, as a result of a referendum among producers held in 1936, Tasmania withdrew from the plan and the State Act expired. In the Commonwealth Act power was given to regulate interstate trade whilst the State Acts were designed to regulate trade within the respective States. The authority set up by each State Act fixed the proportion of the State's production to be sold within the State, whilst the Commonwealth Act protected this allocation by regulating the movement of butter and cheese from one State to another and so ensured the removal from the Australian market of the surplus production.

The compulsory plan was invalidated by the decision of the Privy Council which declared in the *James (Dried Fruits) Case* that no power existed in the Commonwealth Constitution to regulate trade between the States; the marketing of dairy produce is now being continued on a voluntary basis.

4. *Mixed Farming.*—Dairying is not now, as formerly, wholly confined to agriculturists, since many graziers in a large way of business have lately given it their attention. In non-coastal regions it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established. The extent to which dairy cows and pigs are run in conjunction with the growing of wheat is referred to in Chapter XX.—Agriculture.

5. *Factory System.*—Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories, supplied by numerous separating establishments or "creameries," has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, etc., may be profitably worked at the larger establishments. The product is also of a more uniform quality and the number of farmers who prefer to convert the cream rather than send it to the factory is rapidly diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires less than $2\frac{1}{2}$ gallons.

6. *Butter and Cheese Factories.*—The factories in Australia for the manufacture of butter, cheese and condensed milk numbered 517 in 1935-36 as compared with 563 in 1927-28. The factories were distributed among the States as follows:—New South Wales, 130; Victoria, 176; Queensland, 98; South Australia, 42; Western Australia, 24; and Tasmania, 47. Fuller details regarding numbers of factories, output, etc., are given in Chapter XXIV.

7. *Ottawa Conference.*—The agreement reached at the Imperial Economic Conference at Ottawa in August, 1932, has materially assisted the dairying, bee and poultry industries. Under its terms free entry into the United Kingdom of eggs, poultry, butter, cheese and other milk products of Australian origin was allowed for the three years to 15th November, 1935, and thereafter pending further arrangements, while similar goods imported from foreign countries were subjected to customs duties. The rates imposed on the undermentioned items were as follows:—butter, 15s. per cwt.; cheese, 15 per cent. ad valorem; eggs in shell, 1s. od. to 1s. 9d. per great hundred; honey, 7s. per cwt.; milk powder, unsweetened, 6s. per cwt.; and condensed milk, 5s. and 6s. per cwt. The review of these preferences is reserved to the Government of the United Kingdom. The Agreement at the Ottawa Conference regarding the regulation of imports of bacon has been superseded by the introduction of a Bacon Marketing Scheme by the British Government. Under this scheme foreign supplies are adjusted according to the quantities furnished by British and Dominion producers. Details of imports into the United Kingdom are given in § 9 hereafter.

8. **Employment.**—The number of persons employed in the dairying industry is ascertained at the annual census of dairy production. The particulars collected are in respect of those persons who are permanently engaged in the actual work of the farm and include owner, occupier or manager, members of the family and other permanent employees. Casual hands are excluded: so are females whose duties are mainly domestic although they may assist in the outdoor work of the farm. In the earlier years, however, these females were in many cases included as farm workers.

EMPLOYMENT IN DAIRYING INDUSTRY.

Year and Sex.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
		No.	No.	No.	No.	No.	No.	No.
1915-16	Males	21,979	18,450	12,474	1,284	521	1,033	55,741
	Females	15,404	12,249	11,326	8,242	424	2,256	50,822
1925-26	Males	30,351	31,634	21,583	2,084	1,840	2,242	89,734
	Females	15,027	14,391	15,016	2,848	546	2,008	49,836
1931-32	Males	36,601	40,630	27,349	3,220	3,838	3,565	115,203
	Females	7,923	8,407	18,123	2,398	1,123	1,163	39,137
1932-33	Males	38,196	40,895	28,602	3,531	4,437	3,830	119,491
	Females	7,788	10,433	18,587	2,602	1,296	1,576	42,282
1933-34	Males	38,358	41,433	29,808	4,087	5,142	3,542	122,370
	Females	7,246	8,466	19,539	2,987	1,305	2,125	41,668
1934-35	Males	38,231	41,833	32,132	4,339	5,089	3,138	124,762
	Females	6,823	8,531	20,493	3,244	1,189	1,916	42,196
1935-36	Males	38,150	42,072	31,457	4,500	5,495	3,539	125,183
	Females	6,481	7,790	21,080	2,756	1,249	2,462	41,818

The employment of males shown in the above table gives some indication of the expansion of the dairying industry since 1915-16. This is further exemplified in the following table:—

DAIRYING INDUSTRY—AUSTRALIA.

Year.	Number of Dairy Cows.	Production of Butter.	Value of Machinery employed on Dairy Farms.	Number of Males employed.
	No.	lb.	£	No.
1915-16	1,684,393	137,672,313	1,024,000	55,741
1925-26	2,382,002	273,313,685	2,470,000	89,734
1935-36	3,437,224	433,722,475	4,265,000	125,183

§ 2. Dairy Cattle and Dairy Products.

1. **Dairy Herds.**—The dairy herds of Australia were severely depleted during the drought of 1914-15, when the number was reduced to 1,684,393. Following that year there has been a steady expansion in the number of dairy cattle until in 1935 there were 3.4 million, the number having doubled in the course of two decades. In New South Wales, Victoria, South Australia and Tasmania the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory and Western Australia there is a greatly preponderating number of other cattle, the main object in these areas being the production of beef. Dairying, however, has developed greatly in Southern Queensland since 1914-15, and the largest contribution to the Australian increase previously mentioned has been made by this State. The number of dairy cows shown in the following table includes heifers intended for milking and being within three months of calving. These heifers, however, are not collected in Tasmania, but in the other States they numbered 145,176.

CATTLE AND DAIRY CATTLE.—NUMBER.

State.		1931.	1932.	1933.	1934.	1935.
New South Wales	{ All Cattle ..	2,093,586	3,141,174	3,561,771	3,482,831	3,388,538
	{ Dairy Cows ..	1,020,947	1,068,605	1,097,842	1,112,861	1,091,562
Victoria	{ All Cattle ..	1,637,530	1,900,922	2,002,233	2,085,080	2,091,246
	{ Dairy Cows ..	775,538	887,996	910,187	951,849	987,676
Queensland	{ All Cattle ..	5,550,000	5,800,000	5,881,170	6,080,000	6,100,000
	{ Dairy Cows ..	775,301	877,943	877,409	939,254	955,746
South Australia	{ All Cattle ..	205,324	312,932	352,728	346,479	335,354
	{ Dairy Cows ..	127,756	140,172	163,875	170,250	173,706
Western Australia	{ All Cattle ..	826,532	857,473	885,669	911,040	882,761
	{ Dairy Cows ..	99,287	114,022	121,818	120,875	130,132
Tasmania	{ All Cattle ..	232,444	250,807	262,252	261,588	270,035
	{ Dairy Cows ..	81,800	87,854	94,373	91,223	97,350
Northern Territory	{ All Cattle ..	749,745	780,121	859,867	809,679	900,535
	{ Dairy Cows ..	(a)	(a)	(a)	(a)	(a)
Federal Capital Territory	{ All Cattle ..	5,395	4,643	6,790	8,433	10,186
	{ Dairy Cows ..	643	411	426	1,019	1,052
Australia	{ All Cattle ..	12,260,955	12,785,137	13,512,486	14,048,671	13,911,659
	{ Dairy Cows ..	2,881,272	3,101,003	3,265,932	3,376,331	3,437,224

(a) Not available.

2. Milk.—The annual quantity of milk produced per dairy cow varies greatly with breed, locality and season, reaching as high as 1,000 gallons, but averaging for the whole of Australia for all dairy cows and for all seasons prior to 1916 considerably under 300 gallons per annum. In recent years not only has there been an improvement in the quality of the cattle, but the application of scientific methods is being continually extended, and the 300 gallon average has been exceeded in each year since 1924, the yield of 392 gallons in 1931 constituting a record. The average annual yields per cow given in the following table for the last five years are based on the number of dairy cows which were in milk during any part of the year. The average given is, therefore, below that for cows which were yielding during the greater part of the year. It should be noted that there are many difficulties attending the collection of the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with any degree of accuracy the average number of cows in milk during the same period. The average yield per cow shown hereunder may be accepted as sufficiently reliable to show the general trend:—

MILK PRODUCTION.

Heading.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Fed. Cap. Ter.	Australia. (b)
1931-32—								
Dairy Cows (a) .. No.	935,433	722,335	718,677	107,075	87,275	79,312	614	2,650,726
Production 1,000 gals.	332,293	362,868	231,688	50,001	29,890	31,306	280	1,038,326
Aver. per cow .. gal.	355	502	322	466	342	395	456	392
1932-33—								
Dairy Cows (a) .. No.	992,343	831,767	751,038	122,710	100,755	84,827	460	2,884,800
Production 1,000 gals.	320,659	396,716	232,130	58,499	33,634	33,847	255	1,080,740
Aver. per cow .. gal.	323	477	315	477	334	399	554	375
1933-34—								
Dairy Cows (a) .. No.	1,028,874	878,972	799,537	139,482	112,005	91,115	400	3,050,385
Production 1,000 gals.	368,691	368,806	289,065	54,400	34,904	29,160	277	1,145,303
Aver. per cow .. gal.	358	420	362	390	312	320	693	373
1934-35—								
Dairy Cows (a) .. No.	1,052,644	887,841	870,637	150,745	120,045	92,799	683	3,175,391
Production 1,000 gals.	357,459	403,039	302,173	53,359	36,758	31,840	297	1,184,925
Aver. per cow .. gal.	340	454	347	354	306	313	435	373
1935-36—								
Dairy Cows (a) .. No.	1,055,539	925,295	910,760	156,122	123,032	91,286	988	3,206,022
Production 1,000 gals.	345,346	399,774	261,266	59,042	38,138	33,737	272	1,137,513
Aver. per cow .. gal.	327	432	287	378	308	358	275	348

(a) Mean for the year.

(b) Exclusive of Northern Territory.

3. Butter and Cheese.—Although the quantity of dairy production is affected by the nature of the season, the large increase in the output of butter has been maintained in recent years despite the unfavourableness of some seasons. The average annual production rose from 263,000,000 lb. for the quinquennium 1921-1925 to 433,000,000 lb. for the latest five years. The largest production of butter in Australia was recorded

in 1934-35, when, as a result of a specially favourable season, 469,000,000 lb. were manufactured. In 1935-36 seasonal conditions reduced the yield to 433,700,000 lb. and indications point to a further reduction to 393,000,000 lb. in 1936-37.

The total output of cheese is likewise dependent upon seasonal conditions. The production in 1935-36 was 38,600,000 lb. compared with the maximum output of 39,975,000 lb. in 1934-35.

The development in dairy production since 1896, and in the exports of butter from 1901 onwards, is shown in the graphs on pages 652 and 653. The production of butter and cheese for the last five years was as follows:—

BUTTER AND CHEESE PRODUCTION.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
BUTTER.					
	lb.	lb.	lb.	lb.	lb.
New South Wales	123,252,722	128,210,092	147,963,411	145,277,595	125,109,296
Victoria	132,131,812	144,564,666	134,943,577	147,551,500	141,038,597
Queensland	98,013,043	103,032,474	127,343,160	133,624,597	115,020,415
South Australia	17,663,029	21,310,006	19,755,655	18,513,226	20,004,305
Western Australia	10,109,795	11,460,661	11,011,912	13,303,003	12,003,745
Tasmania	9,462,866	11,071,641	9,003,800	10,689,043	10,013,358
Federal Capital Territory ..	20,803	16,273	16,283	15,086	15,019
Australia	390,654,070	419,674,803	450,936,428	469,078,732	433,722,475
CHEESE.					
	lb.	lb.	lb.	lb.	lb.
New South Wales	6,599,357	7,193,806	9,072,508	8,145,468	7,550,203
Victoria	7,723,328	9,189,018	8,363,233	10,095,139	10,073,804
Queensland	11,021,963	13,081,959	13,867,320	12,192,383	9,140,283
South Australia	5,096,731	6,093,170	5,316,971	6,649,661	8,103,663
Western Australia	909	138,051	285,461	643,571	805,182
Tasmania	989,685	1,235,302	1,551,000	1,918,963	2,150,281
Australia	31,422,973	36,933,306	38,476,493	39,975,185	38,596,710

4. **Condensed or Concentrated Milk.**—The manufacture of this product is of comparatively recent growth, the quantity of milk treated in 1901 being negligible, but production increased annually until in 1911 the output reached 23 million lb., nearly doubling that of the previous year. Thereafter rapid progress was made, the greatest development taking place in Victoria. The output of condensed, concentrated and powdered milk in this State amounted in 1931-32 to 41,409,540 lb.; in 1932-33 to 44,186,979 lb.; in 1933-34 to 41,899,267 lb.; in 1934-35 to 51,300,856 lb. and in 1935-36 to 38,598,154 lb. Production in New South Wales during 1935-36 was 9,528,911 lb. No condensed or concentrated milk is made in Tasmania. Information regarding production in the remaining States is not available for publication, but the volume is not very large. Imports of milk into Australia consist almost entirely of malted or otherwise medicated milk.

5. **Oversea Trade in Butter, Cheese and Milk.**—The following tables give the imports, exports and net exports of butter, cheese and condensed milk. In each of the five years dealt with the exports of these commodities exceeded the imports:—

BUTTER, CHEESE AND MILK, IMPORTS AND EXPORTS.—AUSTRALIA.

Australian Currency Values.

Products.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
IMPORTS.					
Butter	£ 2,359	2,471	2,096	3,826	2,078
"	150	199	113	309	167
Cheese	86,892	58,453	74,791	88,511	130,749
"	8,205	5,283	5,040	7,052	70,225
Milk—concentrated and preserved ..	312,730	260,311	60,289	12,861	110,343
"	£ 12,016	9,408	2,342	942	3,503

BUTTER, CHEESE AND MILK, IMPORTS AND EXPORTS.—AUSTRALIA *contd.*

Products.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
EXPORTS.					
Butter lb.	226,329,334	244,299,732	262,513,906	212,616,177	174,309,146
.. .. . £	9,204,065	8,104,220	9,586,776	9,028,243	7,716,473
Cheese lb.	11,799,205	9,314,529	16,829,780	12,973,627	13,924,572
.. .. . £	320,084	229,388	404,024	337,467	384,027
Milk—concentrated and preserved lb.	24,452,610	19,773,041	16,591,664	16,064,023	22,210,935
.. .. . £	927,558	759,031	711,242	722,301	850,231

NET EXPORTS.					
Butter lb.	226,326,975	244,297,261	262,516,810	212,643,351	174,306,468
.. .. . £	9,204,515	8,194,021	9,586,663	9,027,934	7,716,306
Cheese lb.	11,712,373	9,256,076	16,754,989	12,881,116	13,793,823
.. .. . £	311,879	224,105	308,075	330,415	373,802
Milk—concentrated and preserved lb.	24,139,880	19,512,730	16,533,375	16,048,102	22,103,592
.. .. . £	915,542	729,623	708,900	721,359	846,666

6. Local Consumption of Butter and Cheese.—The local production of butter and cheese, with the subtraction therefrom or the addition thereto of the net export or import for the corresponding period, represents approximately the quantity available for consumption in Australia. The figures for the five years ended 1935-36 are as follows:—

BUTTER AND CHEESE.—LOCAL CONSUMPTION.

Products.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
.. .. . lb.	.. .. . lb.	.. .. . lb.	.. .. . lb.	.. .. . lb.	.. .. . lb.
Butter .. Total	189,016,191	193,347,828	206,639,167	206,561,922	221,080,124
.. .. Per head of population ..	28.96	29.27	31.05	30.82	32.75
Cheese .. Total	24,168,941	25,220,933	29,220,417	23,220,196	25,714,600
.. .. Per head of population ..	3.70	3.82	4.39	3.46	3.81

Consumption in 1935-36 averaged 32.75 lb. of butter and 3.81 lb. of cheese per head of population. The consumption of butter in the United Kingdom, Canada and New Zealand is given at 24.8 lb., 31.4 lb., and 40.0 lb. per head per annum respectively, while that of cheese amounted to 8.8 lb., 3.4 lb., and 5.5 lb. respectively.

§ 3. Pigs and Pig Products.

1. Pigs.—The number of pigs in Australia has varied considerably since the commencement of the present century. In 1904 the total amounted to 1,062,703, but after a period of fluctuations it declined to 695,068 in 1919. In 1921 the number increased to 960,000 and from that year it remained fairly constant up to 1928. Since that year more than 1,000,000 pigs have been recorded annually in Australia, with the maximum figure of 1,293,964 in 1935. The distribution of pigs among the States and Territories in the latter year was—New South Wales, 436,944; Victoria, 314,301; Queensland, 304,888; South Australia, 93,458; Western Australia, 98,026; Tasmania, 45,163; Northern Territory, 555; Federal Capital Territory, 629. Total, 1,293,964. The figures for New South Wales, Victoria and the Federal Capital Territory represent the number as on the 31st March, 1936.

A more accurate index of the development of pig raising in Australia is provided in the following table which combines the number of slaughtering with the numbers returned each year from 1926. The table discloses substantial increases in the number of pigs raised over the period under review:—

NUMBER OF PIGS AND NUMBER SLAUGHTERED.—AUSTRALIA.

Year.	Number of Pigs.	Number Slaughtered.	Year.	Number of Pigs.	Number Slaughtered.
1926	989,009	1,395,563	1931	1,167,845	1,510,635
1927	878,207	1,302,402	1932	1,162,407	1,585,133
1928	910,181	1,360,388	1933	1,046,867	1,636,974
1929	1,018,324	1,337,001	1934	1,158,274	1,763,332
1930	1,071,679	1,400,718	1935	1,293,964	1,983,745

2. **Bacon and Ham.**—The highest production of bacon and ham was reached in 1935-36 with an output of 77,655,178 compared with 72,000,000 lb., the average for the last five years. The production in the several States in 1935-36 was as follows :—New South Wales, 22,057,458 lb.; Victoria, 18,165,168 lb.; Queensland, 23,198,346 lb.; South Australia, 6,783,216 lb.; Western Australia, 5,465,098 lb.; Tasmania, 1,984,722 lb.; Federal Capital Territory, 1,170 lb.; Total, 77,655,178 lb. Practically the whole of the bacon and ham produced is consumed locally. On the experience of the last five years the local consumption was about 70,000,000 lb. per year, or 10.5 lb. per unit of population. The bacon and ham exported from Australia is consigned chiefly to the Pacific Islands and the East.

3. **Pork Consumption.**—Particulars available regarding the consumption of pork (excluding bacon and ham) give an average for Australia of 8.95 lb. per head of population. Including bacon and ham, the average consumption amounted to 20.25 lb. compared with 17 lb. in New Zealand, 67.75 lb. in Canada, and 68 lb. in the United States of America.

4. **Oversea Trade in Pig Products.**—The oversea trade in pigs and pig products for the last five years is shown in the following table :—

PIG PRODUCTS.—OVERSEA TRADE, AUSTRALIA.

Australian Currency Values.

Particulars.			1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Pigs.							
Imports	..	No.	6	12	11	39	10
"	..	£	242	291	257	2,124	413
Exports	..	No.	28	201	239	131	164
"	..	£	192	809	799	708	607
Net Exports	..	No.	22	189	228	92	154
"	..	£	-50	518	542	-1,416	194
BACON AND HAM.							
Imports	..	lb.	7,135	11,014	11,712	5,168	2,760
"	..	£	468	803	774	313	209
Exports	..	lb.	1,598,106	1,664,501	1,562,498	1,701,575	1,736,118
"	..	£	95,128	96,579	98,825	109,760	112,680
Net Exports	..	lb.	1,590,971	1,653,487	1,550,786	1,696,407	1,733,358
"	..	£	94,660	95,776	98,051	109,447	112,471
LARD.							
Imports	..	lb.	24,644	17,973	25,718	6,963	29,644
"	..	£	694	481	493	301	941
Exports	..	lb.	1,620,560	1,183,680	2,523,740	2,702,008	4,049,820
"	..	£	27,385	25,969	41,758	53,603	69,382
Net Exports	..	lb.	1,595,916	1,165,707	2,498,031	2,785,045	4,020,182
"	..	£	26,691	25,488	41,265	53,302	68,441
FROZEN PORK.							
Imports	..	lb.	180	..	150,032	85,942	7,746
"	..	£	10	..	6,703	3,513	210
Exports	..	lb.	6,703,234	8,663,864	15,636,132	23,577,743	26,716,453
"	..	£	154,163	210,793	401,306	587,410	687,043
Net Exports	..	lb.	6,703,054	8,663,864	15,486,100	23,491,801	26,708,707
"	..	£	154,153	210,793	394,603	583,897	686,833

NOTE.—The minus sign (—) signifies net imports.

Hitherto the output of pig products in Australia was usually sufficient to meet local requirements and provide a small surplus for export. During the five years ended 1935-36, however, overseas exports of frozen pork showed a remarkable increase averaging

12.3 million lb. as compared with an average of 373,000 lb. for the five years ended 1930-31. The chief pig product consumed in the United Kingdom is bacon and ham, the imports of which during 1936 amounted to 7.2 million cwt., valued at £30,300,000, the supplies being obtained chiefly from Denmark.

The agreement at the Ottawa Conference regarding the regulation of supplies from foreign countries and the Dominions has been superseded by the institution of a Bacon Marketing Scheme by the British Government. The scheme aims at creating a regular market for home producers of bacon pigs and necessitates adjustment of foreign supplies to conform with British bacon factories' requirements after estimated home and Dominion production is provided for. The estimated share of Australian production in this market was allocated at 8 million lb. in 1935, 14½ million lb. in 1936, and 22 million lb. in 1937, figures which indicate a steady expansion of this trade in bacon pigs.

§ 4. Total Dairy Production.

The total dairy production for each State in 1935-36 is shown below:—

PRINCIPAL DAIRY PRODUCTION.—1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Total.
MILK.								
Used for—	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
Butter ..	269,432,176	320,579,016	236,159,826	42,494,389	28,162,604	25,952,034	51,648	922,831,693
Cheese ..	7,571,601	11,152,655	9,005,847	7,736,750	812,637	2,171,454	..	38,450,944
Condensing and con- centrating	8,052,761	10,522,736	..	..	..	..	..	18,575,497
Other pur- poses ..	60,289,716	57,487,794	616,100,533	68,810,921	69,162,817	5,613,279	220,023	157,685,083
Total ..	345,346,254	399,742,201	261,266,206	59,042,060	38,138,058	33,736,767	271,671	1,137,543,217

BUTTER.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In factories	19,123,337	143,161,374	112,499,567	17,017,490	10,967,662	8,016,634	..	410,786,064
On Dairy and other Farms ..	6,045,959	4,971,133	3,420,848	3,946,815	1,941,083	2,596,724	13,849	22,936,411
Total ..	125,169,296	148,132,507	115,920,415	20,964,305	12,908,745	10,613,358	13,849	433,722,475

CHEESE.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In Factories	7,060,100	10,798,199	9,149,113	8,103,243	863,289	2,109,551	..	38,083,495
On Dairy and other Farms ..	296,103	175,605	170	420	2,193	49,730	..	515,221
Total ..	7,356,203	10,973,804	9,149,283	8,103,663	865,482	2,159,281	..	38,598,716

CONDENSED, CONCENTRATED, OR POWDERED MILK.

In Factories	lb. 9,528,911	lb. 38,598,154	lb. (a)	lb. (a)	lb. (a)	lb. ..	lb. ..	lb. (b) 52,114,854
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(a) Figures not available for publication.
milk used for condensing and concentrating.

(b) Including States marked (a).

(c) Includes

PRINCIPAL DAIRY PRODUCTION, 1935-36—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Total.
BACON AND HAM.								
In Factories	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
On Dairy	21,155,669	17,099,350	23,017,074	6,274,041	5,315,841	1,416,643	..	74,278,818
and other								
Farms ..	901,789	1,065,618	181,272	509,175	149,257	568,079	1,170	3,376,360
Total ..	22,057,458	18,165,168	23,198,346	6,783,216	5,465,098	1,984,722	1,170	77,655,178

Particulars in regard to the production of other milk products are not available for all the States, but casein amounting to 3,730,978 lb., valued at £69,745, was manufactured in Victoria during 1935-36.

§ 5. Value of Dairy Production.

The values of dairy production on a gross, local and net basis are shown in the following table. The presentation of these values has become possible by the adoption in the several States of uniform principles in determining production and marketing costs. Production values for this and other industries are dealt with more fully in Chapter XXVIII.—Miscellaneous.

GROSS, LOCAL AND NET VALUE OF DAIRY PRODUCTION, 1935-36.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production (a)
				Fodder fed to Farm Stock.	Value of Other Materials used in process of Production.	
	£	£	£	£	£	£
New South Wales ..	12,060,000	1,455,000	10,605,000	1,401,000	9,000	9,195,000
Victoria ..	11,370,904	400,988	10,915,016	1,470,874	100,000	9,344,742
Queensland ..	7,221,000	247,000	6,974,000	902,000	143,000	5,869,000
South Australia ..	1,898,534	64,027	1,834,507	384,496	50,870	1,393,141
Western Australia ..	1,335,480	46,757	1,288,723	664,728	118,594	505,401
Tasmania ..	787,120	37,840	749,280	188,500	20,150	540,600
Total { 1935-36	34,678,738	2,311,612	32,367,126	5,071,598	447,644	26,847,884
{ 1934-35	31,373,771	2,215,442	29,158,329	4,566,888	231,201	24,360,240
{ 1933-34	27,439,149	1,962,017	25,466,132	4,467,143	238,737	20,762,252

(a) No account has been taken of maintenance costs and depreciation.

§ 6. Poultry Farming.

1. General.—Poultry is kept in varying numbers by farmers, and production therefrom furnishes a considerable addition to the annual agricultural or dairying returns. For many years, however, poultry-keeping has been carried on as a separate industry, while it is also practised in conjunction with other rural industries. Special poultry farms have been instituted by the State Governments for scientific breeding, experts have been appointed to advise and instruct in the care and management of the various kinds of poultry, and exhibitions of leading breeds have been arranged, as well as egg-laying competitions. Co-operative egg-collecting circles have been formed in some districts; eggs are also delivered with milk and cream to the local butter factories, and thence forwarded to market.

2. Number of Principal Kinds.—The number of principal kinds of poultry is included in the annual census of live stock in all States except Victoria and Tasmania. The former State completed a census at 30th June, 1933, and the numbers at that date are shown in the table below. The details for Tasmania have been estimated. In 1913 a complete census was also taken and these data have been included for comparative purposes in the following table:—

POULTRY.—NUMBER OF PRINCIPAL KINDS—AUSTRALIA.

State.	Fowls.	Ducks.	Geese.	Turkeys.
1913.				
	No.	No.	No.	No.
New South Wales ..	3,351,629	261,075	23,948	216,274
Victoria ..	3,555,538	288,413	59,851	(a) 100,000
Queensland ..	841,630	35,337	7,457	27,192
South Australia ..	1,440,385	55,659	18,245	49,066
Western Australia ..	999,452	100,828	6,243	40,588
Tasmania (a) ..	350,000	35,000	12,000	8,000
Total ..	10,838,634	776,312	127,744	450,120
1935-36.				
	No.	No.	No.	No.
New South Wales ..	5,263,271	201,844	29,630	232,229
Victoria (b) ..	5,496,969	292,882	39,283	113,966
Queensland ..	1,182,343	38,719	4,339	10,132
South Australia ..	2,040,025	57,522	19,500	60,799
Western Australia ..	1,380,035	28,293	2,395	25,586
Tasmania (a) ..	450,000	35,000	10,000	10,000
Total ..	15,818,643	654,260	105,207	452,712

(a) Estimated.

(b) 30th June, 1933.

3. Value of Poultry Products.—Difficulty is experienced in obtaining complete figures for the production of poultry products. Arising from a series of Conferences of Australian Statisticians uniform procedure has been established for the valuation of these products. The following table sets out the values accruing to the poultry industry for Australia on a gross, local and net basis, and has been compiled from data actually collected or carefully estimated by the State Statistical Bureaux:—

GROSS, LOCAL AND NET VALUE OF POULTRY PRODUCTS, 1935-36.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Feed and Other Costs.	Net Value of Production. (a)
	£	£	£	£	£
New South Wales ..	3,702,000	263,000	3,439,000	1,236,000	2,203,000
Victoria ..	3,600,671	270,951	3,330,620	997,000	2,333,620
Queensland ..	555,000	92,000	463,000	164,000	299,000
South Australia ..	752,945	96,250	656,695	399,607	257,088
Western Australia ..	600,769	108,305	492,464	222,050	270,414
Tasmania ..	364,370	27,330	337,040	31,000	305,440
Total	{ 1935-36 9,575,755 { 1934-35 8,955,815 { 1933-34 8,542,275	{ 856,936 { 857,091 { 801,683	{ 8,718,819 { 8,098,724 { 7,740,592	{ 3,050,257 { 2,837,065 { 2,561,232	{ 5,668,562 { 5,261,659 { 5,179,360

(a) No account has been taken of maintenance costs and depreciation.

4. Oversea Trade in Poultry Products.—The Australian overseas export of poultry products is confined chiefly to eggs in shell and egg contents which are mainly consigned to the United Kingdom; New South Wales, Victoria and South Australia are the largest exporters, the total exports in 1936-37 amounting to £974,334. The levying in accordance with the Ottawa Conference Agreement of a customs duty varying between 1s. and 1s. 9d. per 10 dozen by the Government of the United Kingdom on imported eggs of foreign origin has assisted Australia to obtain a larger share in this valuable market. Exports from Australia rose from less than 3 million dozen valued at £219,000 in 1928-29 to 21.7 million dozen valued at more than £1.1 million in 1934-35, but declined during the past two years to 15.5 million dozen in 1936-37. The exports of frozen poultry have also increased. The overseas trade during the last five years was as follows:—

POULTRY PRODUCTS, TRADE.—AUSTRALIA.

Australian Currency Values.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
LIVE POULTRY.					
Imports No.	253	77	137	154	2,780
" £	788	239	401	605	1,256
Exports No.	1,742	2,047	1,233	1,733	1,099
" £	896	986	799	973	572
Net Exports .. No.	1,489	1,970	1,096	1,579	—1,681
" £	108	747	398	368	—684

FROZEN POULTRY.

Imports lb.	20,486	13,290	3,129	11,671	11,589
" £	809	919	147	467	616
Exports pair	60,921	33,538	39,310	52,377	40,734
" £	40,266	16,798	20,490	36,078	35,432
Net Exports	(a)	(a)	(a)	(a)	(a)
" £	39,457	15,879	20,343	35,611	34,816

EGGS.

Imports doz.	6,722	6,003	7,002	7,311	7,610
" £	397	333	408	397	356
Exports doz.	16,844,288	19,617,032	21,718,740	17,365,132	15,159,027
" £	958,065	1,058,164	1,148,254	910,892	954,578
Net Exports doz.	16,837,566	19,611,029	21,711,738	17,357,821	15,451,417
" £	957,668	1,057,831	1,147,846	910,495	954,222

EGG-CONTENTS.

Imports lb.	9,470	24,173	31,257	46,917	32,729
" £	1,755	3,491	3,388	3,957	4,004
Exports lb.	(a)	(a)	(a)	290,612	652,858
" £	60,549	8,484	3,479	7,170	19,756
Net Exports lb.	(a)	(a)	(a)	243,695	620,129
" £	58,794	4,993	91	3,213	15,752

(a) Quantity not available.

§ 7. Bee Farming.

1. General.—Although practised to some extent as a separate industry, bee-farming is frequently carried on in conjunction with agriculture or dairying. The returns of honey from productive hives during 1935-36 gave an average of 62.2 lb. per hive, while the average quantity of wax was 0.75 lb. per hive.

2. Production of Honey and Beeswax.—The number of hives and the production of honey and beeswax during the year 1935-36 are given in the following table. As these details have been collected from holdings of one acre and upwards, any production from smaller areas is omitted and consequently the production to that extent is understated. In Victoria and South Australia, however, the compulsory registration of beekeepers enables the collection to cover all producers and the production for these States is considered to be complete.

BEE-HIVES, HONEY AND BEESWAX, 1935-36.

State.	Bee Hives.			Honey Produced.		Beeswax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	No.	No.	No.	lb.	£	lb.	£
New South Wales ..	76,481	19,875	96,356	4,577,097	70,564	62,886	4,884
Victoria ..	85,071	14,579	99,650	5,901,463	92,210	61,849	4,123
Queensland ..	12,484	3,704	16,188	584,288	7,912	8,656	613
South Australia ..	68,591	14,388	82,979	4,160,006	34,667	46,570	2,814
Western Australia ..	15,342	1,273	16,615	916,929	11,389	13,952	748
Tasmania ..	5,509	2,072	7,581	238,055	4,216	3,416	214
Fed. Cap. Territory ..	60	72	132	7,000	108	26	2
Australia ..	263,538	55,963	319,501	16,384,838	221,066	197,355	13,398

The table hereunder gives the production of honey and beeswax for the latest available five years:—

HONEY AND BEESWAX PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Fed. Cap. Ter.	Australia.
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HONEY.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1931-32	2,123,233	2,159,770	283,022	1,240,525	250,146	52,559	1,480	6,110,735
1932-33	2,921,242	3,543,193	531,075	4,701,520	438,209	127,896	2,976	12,356,027
1933-34	1,397,426	1,133,279	610,330	2,861,957	621,275	108,334	..	6,491,701
1934-35	5,539,677	2,779,791	701,200	4,155,450	814,419	67,717	10,120	11,125,412
1935-36	4,577,097	5,901,463	584,288	4,160,006	916,929	138,055	3,416	16,384,838

BEESWAX.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1931-32	27,933	26,239	6,082	17,253	4,251	644	80	82,482
1932-33	38,715	41,827	9,948	52,273	7,343	2,741	50	152,897
1933-34	27,069	15,102	8,727	31,891	8,643	2,038	..	93,470
1934-35	70,564	30,351	9,745	45,515	11,222	1,475	22	168,894
1935-36	62,886	61,849	8,656	46,570	13,952	3,416	26	197,355

The production of honey and beeswax varies greatly from year to year according to the favourableness or otherwise of the seasons. During the last five years New South Wales produced on the average 3,312,000 lb. of honey and 45,400 lb. of beeswax; Victoria produced 3,103,000 lb. of honey and 35,100 lb. of wax; and South Australia 3,382,000 lb. of honey and 38,700 lb. of wax. These States together accounted for 88.3 per cent of the total Australian production of honey and 85.7 per cent. of the beeswax. Next in order of importance were Queensland, Western Australia and Tasmania.

3. Value of Production.—The following table shows the gross, local and net values of production which have been compiled by the Statisticians of the several States on uniform methods. These data are based upon actual records but as previously explained it is known that the production in some States is understated. No production costs are taken into account and consequently the gross production valued at the farm and net values are identical.

GROSS, LOCAL AND NET VALUE OF BEE PRODUCTS, 1935-36.

State.		Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Net Value of Production.(a)
		£	£	£	£
New South Wales		75,000	7,000	68,000	68,000
Victoria		96,333	18,828	77,505	77,505
Queensland		8,525	2,500	6,025	6,025
South Australia		37,481	6,114	31,367	31,367
Western Australia		12,137	..	12,137	12,137
Tasmania		4,430	220	4,210	4,210
Total	{ 1935-36 ..	233,906	34,662	199,244	199,244
	{ 1934-35 ..	235,027	31,520	203,507	203,507
	{ 1933-34 ..	99,757	13,871	85,886	85,886

(a) No account has been taken of maintenance costs and depreciation.

4. Oversea Trade in Bee Products.—In normal years the production of honey exceeds Australian requirements, and a small quantity is available for export. The imports into the United Kingdom average 80,000 cwt. annually, of which Australia supplies approximately 1,200 cwt. At the Imperial Economic Conference at Ottawa in 1932 the representatives of the United Kingdom, on behalf of their Government, agreed to the imposition of an import duty of 7s. per cwt. on foreign honey. For the two years ended 1936-37 the exports from Australia amounted to £43,220 compared with a total of £30,578 for the previous five years. The more general use of frame hives has reduced the production of wax, and as a result the quantity imported has exceeded that exported during each of the last five years.

For the years 1935-36 and 1936-37, the imports of honey amounted to 7,697 lb. and 4,852 lb., respectively, and the exports to 764,696 lb. and 1,934,162 lb. The imports of beeswax amounted to 74,389 lb. in 1935-36 and 74,168 lb. in 1936-37, and the exports to 395 lb. and 48,656 lb. respectively for the same years.

§ 8. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during each of the last five years are shown below :—

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS.—EXPORTS.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
QUANTITY.					
Beeswax lb.	2,081	1,451	957	395	48,656
Butter "	226,329 334	11,299,722	262,518,006	212,646,477	174,309,146
Cheese "	11,785,156	9,313,714	16,829,351	12,972,627	13,924,572
Eggs not in shell "	(a)	(a)	(a)	290,612	652,858
Eggs doz.	16,844,288	19,617,032	21,718,740	17,365,132	15,459,027
Feathers, undressed "	(a)	(a)	(a)	(a)	(a)
Honey lb.	406,851	351,674	388,761	264,666	1,934,162
Lard "	1,620,590	1,483,456	2,523,749	2,792,008	4,049,826
Meats—					
Bacon and Ham pair	1,596,706	1,664,501	1,562,498	1,701,575	1,736,118
Frozen Poultry lb.	60,921	33,538	39,310	52,377	40,734
Frozen Pork "	6,703,234	8,663,864	15,036,132	23,577,743	26,710,453
Milk, concentrated and preserved "	24,452,509	19,771,958	10,553,824	16,961,023	22,219,935
Pigs, living No.	28	201	239	131	164
Poultry, living "	1,738	2,047	1,233	1,733	1,099
VALUE.					
	£	£	£	£	£
Beeswax "	143	94	76	28	2,940
Butter "	9,264,665	8,194,220	9,586,776	9,028,243	7,710,473
Cheese "	318,895	229,313	403,977	337,467	384,027
Eggs not in shell "	60,549	8,434	3,369	7,170	10,756
Eggs "	958,065	1,058,164	1,148,254	910,892	954,578
Feathers, undressed "	400	604	1,491	2,257	3,110
Honey "	8,014	6,458	6,828	12,840	30,380
Lard "	27,385	25,903	41,758	53,603	69,382
Meats—					
Bacon and Ham "	95,093	96,579	98,825	109,760	112,680
Frozen Poultry "	40,266	16,798	20,490	36,078	35,432
Frozen Pork "	154,163	210,793	401,306	587,410	687,043
Milk, concentrated and preserved "	927,546	739,000	710,166	722,301	850,431
Pigs, living "	192	809	899	708	607
Poultry, living "	846	986	799	973	572
Total "	11,856,222	10,588,355	12,425,014	11,809,730	10,867,211

(a) Quantity not available.

Butter figures most largely in the list of exports shown above, and is consigned mainly to the United Kingdom. During the latest year under review 160,674,000 lb. were shipped thereto, representing 92 per cent. of the total exports. Shipments to the principal Eastern countries were approximately 12,000,000 lb., or nearly 7 per cent. of the total.

§ 9. British Imports of Dairy Products.

1. Quantities and Values.—The following table gives the quantities and values of the principal dairy products imported into the United Kingdom during the years 1932 to 1936 :—

DAIRY PRODUCTS.—IMPORTS, UNITED KINGDOM.

Products.	1932.	1933.	1934.	1935.	1936.
Butter cwt.	8,364,367	8,831,686	9,695,394	9,608,016	9,752,043
" £	41,055,142	34,340,921	33,271,706	39,328,128	44,124,184
Cheese cwt.	3,003,113	3,039,450	2,988,539	2,714,351	2,676,480
" £	9,089,757	7,611,726	7,014,517	6,619,093	7,780,591
Milk, concentrated and preserved cwt.	3,073,080	2,730,385	2,344,678	2,005,528	1,926,803
" £	4,252,202	3,549,210	3,269,018	2,435,822	2,407,277
Bacon and ham cwt.	12,192,188	9,953,167	8,326,535	7,603,672	7,241,397
" £	32,913,045	32,993,984	33,172,222	30,402,240	30,256,502
Pork (a) cwt.	375,259	643,777	1,103,420	915,098	1,025,212
" £	983,548	1,620,323	2,926,863	2,500,315	2,779,006

(a) Frozen, chilled and salted.

2. *Butter.*—(i) *Imports.* Australia has for many years supplied a large proportion of the butter imported into the United Kingdom. The quantity in 1936 amounted to 1,694,222 cwt., or 17 per cent. of the total importation. The Australian contribution was valued at £7,673,015 and was exceeded only by that received from New Zealand and Denmark. These three countries combined supplied 68 per cent. of the total imports compared with 72 per cent. in 1935:—

BUTTER IMPORTS.—UNITED KINGDOM, 1936.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	cwt.	£		cwt.	£
New Zealand ..	2,791,914	13,445,227	Argentine Republic	142,528	559,006
Denmark ..	2,170,542	10,770,929	Estonia ..	116,329	492,855
Australia ..	1,694,222	7,673,015	Union of South		
Netherlands ..	746,101	3,011,217	Africa ..	75,498	322,218
Irish Free State ..	468,272	1,694,339	British Possessions,		
Soviet Union ..	415,055	1,648,040	n.e.i. ..	107,119	503,886
Lithuania ..	210,842	883,801	Foreign Countries,		
Latvia ..	196,396	827,358	n.e.i. ..	119,067	480,687
Poland ..	188,954	710,768			
Finland ..	159,761	713,079			
Sweden ..	149,443	687,759	Total ..	9,752,043	44,424,184

(ii) *London Prices.* The average price of first quality Australian salted butter in London during the last ten years is shown in the following table:—

AUSTRALIAN BUTTER.—LONDON PRICES.

Year.	Average Price, first quality, per cwt.	Year.	Average Price, first quality, per cwt.
	s. d.		s. d.
1927	169 6	1932	105 0
1928	171 0	1933	87 0
1929	175 0	1934	75 6
1930	135 6	1935	94 6
1931	116 6	1936	104 6

3. *Cheese.*—The value of cheese imported into the United Kingdom in 1936 was £7,780,591, of which £4,773,080 was received from New Zealand, and £1,920,353 from Canada. Small experimental shipments from Australia were made in 1908 and following years, fair prices being realized. The value of the imports from Australia during 1936 amounted to £230,154.

4. *Bacon and Ham.*—Of a total import of bacon and ham valued in 1936 at £39,350,502, the United Kingdom received imports to the value of £14,954,598 from Denmark, £5,536,479 from Canada, £2,061,544 from the Netherlands, £1,676,019 from Poland and £1,638,708 from the Irish Free State. The import from Australia was small.

5. *Pork.*—The value of the United Kingdom imports of pork (frozen and chilled) was £2,779,906 in 1936. Imports from Australia were valued at £622,275, showing a marked increase over the imports in previous years. The bulk of the supplies were received from New Zealand, namely £1,500,208.

6. *Other Products.*—The imports to the United Kingdom from Australia of beeswax, poultry, game, lard and honey in 1936 were unimportant, but frozen rabbits to the value of £191,040 and eggs in shell to the value of £048,370 representing 77 per cent. and 10 per cent. respectively of the total imports were imported during the year.

CHAPTER XXII.

FORESTRY.*

§ 1. General.

1. *Objects of Forestry.*—Scientific forestry aims at the preservation and development of existing forest areas by safeguarding them against fire, pests and destructive agencies generally, by expert supervision of the removal of timber, by judicious thinning and by reforestation of denuded areas with suitable forest growths of local or exotic origin. It provides also for the continuance of this indispensable form of national wealth by the afforestation of available bare lands proved capable of producing various timbers. Only small areas of virgin forests still remain in Australia, as extensive inroads have been made by timber-getters, by agriculturalists and by pastoralists—who have destroyed large areas by “ring-barking”—and it is not unlikely that climatological changes have resulted therefrom. It is recognized that beneficial consequences follow on the planting of trees on denuded lands, or along eroding coasts, and that a forest covering tends to regulate to the best advantage the effects of rainfall. The existing virgin forests consist of hardwood jungle, or brush, with very little softwood, and the need for extensive softwood planting is urgent.

Efficient forestry is of particular interest in connexion with the Murray River Basin, where a large expenditure from the public funds has been incurred in the provision of locks and weirs and in the formation of irrigation settlements in the lower course of the river. The stability of flow of this river in so far as it can be assured by forest plantation may be regarded as of national importance.

Successful planting of exotics in various parts of Australia has demonstrated that both climate and soil are suitable for the cultivation of a number of highly serviceable softwoods.

2. *Extent of Forests.*—(i) *Australia.* The bulk of the present local timber supply comes from the thickly forested areas in the 30-inch and over rainfall belt south of the tropics, and the 70-inch and over rainfall belt within the tropics. The total forest area included in the divisions specified is comparatively small, and is confined to the following regions:—(a) The coastal belt in the extreme south-west of Western Australia, from a little north of Perth to Albany; (b) the Otway country in the south of Victoria, and the whole of the south-eastern portion of that State; (c) the mountain forests of Victoria and New South Wales; (d) the coastal districts of New South Wales and Queensland; (e) the greater portion of Tasmania; (f) the forests on the Murray River near Echuca; and (g) the cypress pine belt from the Murray northward to Queensland and westward of the coastal belt.

Over 90 per cent. of the timber trees of Australia consists of hardwoods belonging to the genus *Eucalyptus* (Gum Trees). Including the mallies over 400 species are now recognized, but the chief commercial varieties are confined to about 50 species.

In addition to the hardwood forests and the cypress pine belt the coastal strip in Queensland and northern New South Wales provides “rain” or “brush” forests. These tropical forests furnish the serviceable hoop pine and furniture timbers such as black bean, Queensland walnut and maple, silkwood, etc.

* A specially contributed article dealing with Forestry in Australia appeared as part of this Chapter in Official Year Book No. 19 (*vide* pp. 701 to 712 therein).

The drier wooded area of the continent contains a large number of xerophilous trees and woody shrubs which thrive in regions receiving less than 10 inches of rain per annum. Country devoid of tree growth is rare. Unsuitable soil conditions such as basalt formations, clay pans, rock exposures or sand dunes are as a rule more responsible for treeless areas than lack of rainfall. The 300-mile stretch of the Nullarbor Plain is a treeless area where the non-retentive limestone foundation accentuates the effects of a low rainfall. While, however, the major portion of Australia carries trees, and may be said to be wooded (the term "desert" applying to relatively small areas only), dense forest is confined to a very narrow fringe. The savannah forests of the interior yield minor products such as sandalwood and tan barks, but do not produce timber. These open, park-like formations carry scattered trees of low habit only. Practically the whole of Papua and New Guinea carry or has carried dense forests, the exceptions being certain small dry belts where the rainfall is less than 50 inches. Norfolk Island was originally covered with a thick jungle.

Special articles relating to Australian Eucalyptus timbers and the chemical products of Eucalypts will be found in Official Year Book No. 10, pp. 85-98.

Scientific surveys of the forests of the various States have not yet been completed and there are, in consequence, conflicting reports regarding the total forest area of Australia. At the Interstate Conference on Forestry, held at Hobart in April, 1920, it was resolved that a forest area of 24,500,000 acres was necessary to provide for the future requirements of Australia. This area was subsequently adopted at the Premiers' Conference held in May of the same year. Expert foresters, however, consider that approximately 19,500,000 acres represent the possible limit for permanent reservation in Australia. The distribution of the latter area throughout the States was estimated as follows :—

ESTIMATED FOREST AREA.

State.	Total Forest Area.	Percentage on Total Area.
New South Wales	4,000,000	2.02
Victoria	5,500,000	9.78
Queensland	6,000,000	1.40
South Australia	500,000	0.21
Western Australia	3,000,000	0.48
Tasmania	500,000	2.98
Australia	19,500,000	1.02

(ii) *Comparison with Other Countries.* The table hereunder shows the absolute and relative forest areas of Australia and other countries, and the relative areas owned by the State, by Public Institutions and by private individuals, in so far as the details are available. The term "Public Institutions" appears to include local governmental and ecclesiastical authorities, while those held by public companies, co-operative societies, etc., are included with private individuals.

The figures are based on information supplied to the International Institute of Agriculture and are the latest available. Comparisons of the returns for different countries are, however, subject to the qualification that the significance of the term "forest" is not identical in all cases. In older countries, and chiefly in Europe, scientific forestry has been practised for centuries, whereas in newer lands, such as Australia, Canada, etc., it is of comparatively recent application. Moreover, considerable areas included as forests in the newer countries contain indigenous growth of little or no commercial value, and effective comparisons cannot, therefore, be made with countries where efficient forestry has been practised for many years.

FORESTS.—AREA AND OWNERSHIP, VARIOUS COUNTRIES.

Percentage Owned by —

Country.	Forest Area.	Per cent. of Total Area.	State.	Public Institutions other than State.	Privately.
	sq. miles.	Per cent.	Per cent.	Per cent.	Per cent.
Soviet Union	3,667,530	44.7	100.0	..	..
Canada	1,151,402	32.8	(a)	(a)	(a)
United States of America ..	733,539	24.7	(a)	(a)	(a)
India	307,928	27.5	(a)	(a)	(a)
Nigeria	234,990	63.8	(a)	(a)	(a)
Finland	97,540	73.5	39.8	1.7	58.5
Sweden	89,500	56.5	20.1	3.8	76.1
Japan	87,678	59.5	(a)	(a)	(a)
Germany	49,991	27.5	32.6	17.2	50.2
France	40,768	19.2	13.9	23.6	62.5
Poland	32,246	21.5	36.1	..	63.9
Australia (b)	30,469	1.0	(a)	(a)	(a)
Yugoslavia	29,504	30.6	37.5	28.9	33.6
Norway	29,454	24.7	13.0	6.4	80.6
Turkey	28,703	9.7	94.4	..	5.6
Rumania	27,544	24.2	30.5	18.3	51.2
Italy	22,425	18.7	3.0	34.0	63.0
New Zealand	20,778	20.2	(a)	(a)	(a)
Spain	19,305	10.0	(a)	(a)	(a)
Czechoslovakia	17,925	33.0	20.4	15.6	64.0
Union of South Africa ..	15,958	3.4	(a)	(a)	(a)
Algeria	12,257	10.7	(a)	(a)	(a)
Austria	12,116	37.4	15.7	12.6	71.7
Dutch East Indies	11,737	23.1	(a)	(a)	(a)
Bulgaria	11,409	28.8	23.0	58.8	18.2
Greece	9,291	18.5	69.3	10.3	20.4
Latvia	6,406	25.2	83.6	1.8	14.6
Great Britain	4,745	5.4	10.4	1.3	88.3

(a) Not available.

(b) Estimate of forest area possible for permanent reservation.

3. Requisite Proportion of Forest Area.—It is generally held that when the forest area in any country falls below 0.86 acres per head of population, that country will be obliged to import timber. Australia possesses 3.19 acres of forest per head of population, and normally the excess of imports of timber over exports amounts to approximately 28,000,000 cubic feet. There are two reasons for the excess. In the first place, the area of 19,500,000 acres given as the wooded area comprises all forest lands, reproductive or otherwise. The bulk of this area consists of cut-over forests swept by fire at frequent intervals, and the area of really productive forests has not been ascertained. Secondly, Australia does not possess a sufficient supply of softwoods, and must, therefore—with the exception of a small quantity produced in Queensland and New South Wales—import the bulk of its requirements from overseas. Provided that the area of 19,500,000 acres considered possible of permanent reservation by foresters was yielding under silvicultural treatment its maximum of hard and soft woods the timber supply of Australia would be sufficient for a population of 22½ millions.

§ 2. Forestry Activities of the Commonwealth Government.

Forestry was not included amongst the matters transferred from the States to the control of the Commonwealth, and federal supervision, therefore, is restricted to the forests in the Commonwealth Territories. These territories (including Papua, New Guinea and Norfolk Island) cover a large area, and, with the exception of the Northern

Territory, are capable of sound forestry development. It is only within comparatively recent years, however, that any attempt has been made to take stock of the forestry position. The Commonwealth Forestry Bureau was instituted in 1925 to initiate silvicultural and other forest research work and to take charge of the education and training of the professional staffs required by the Commonwealth and the State services. The Bureau received statutory powers under an Act passed in 1930. In the meantime, the Australian Forestry School was established in 1926, and not only was the training of the State forest officers begun, but a nucleus of qualified officers was sent abroad to undergo special courses of instruction with the object of staffing the research side of the Bureau. The financial situation since 1930 has delayed progress on the research side, and the educational work of the Australian Forestry School is at present the Bureau's main activity.

The forest resources of the Territories of Papua, New Guinea, Norfolk Island and the Federal Capital have been investigated, and reports in connexion therewith have been published. In the case of the Federal Capital area an active forest policy has been inaugurated.

The investigation of the dead product of the forests is entrusted to the Council for Scientific and Industrial Research, which has established a Forest Products Division. Research work is being carried out by this institution in regard to various matters, e.g., paper pulp, seasoning, preservation, tan barks, the chemistry of woods, and the utilization of forest products generally, including the substitution of local for imported woods for such purposes as butter boxes and fruit cases.

§ 3. State Forestry Departments.

1. **Functions.**—With the exception of Queensland, the powers and functions of State forest authorities are laid down under Forestry Acts and Regulations. In each State there is a Department or Commission specially charged with forestry work. The functions of these administrations are as follows:—(a) The securing of an adequate reservation of forest lands; (b) The introduction of proper measures for scientific control and management of forest lands; (c) The protection of forests; (d) The conversion, marketing and economic utilization of forest produce; and (e) The establishment and maintenance of coniferous forests to remedy existing deficiency in softwoods.

Annual reports are issued by each State forest authority.

In Victoria a forestry school has been established at which recruits are trained for the forestry service of the State.

2. **Forest Reservations.**—At the Interstate Forestry Conference held in Hobart in 1920, the State forestry authorities agreed in regard to the necessity of reserving an area of 24,500,000 acres of indigenous forest lands in order to meet the future requirements of Australia but, as previously mentioned, it is the considered opinion of expert foresters that 19.5 million acres only are possible of permanent reservation. This area was distributed among the States as set out in Section 1, 2 *ante*.

Having been endorsed by the Premiers' Conference held later in the same year, this area was adopted as the Australian forest requirement towards the permanent reservation of which the authorities are now aiming. The progress made in the various States to the end of June, 1936, is set out in the following table:—

AREA OF FOREST RESERVATIONS, 30th JUNE, 1936.

Particulars.		New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia.
		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Dedicated forests	State	5,147,447	4,083,587	2,640,377	(a) 264,075	3,138,062	1,488,908	16,763,056
Timber and fuel reserves	..	1,410,032	730,515	3,542,469	..	2,194,195	950,000	8,827,238
Total	..	6,557,479	4,814,132	6,182,843	264,075	5,332,857	2,438,908	25,590,294

(a) Includes Timber and Fuel Reserves.

In addition to the work of permanently reserving their respective areas the State foresters are endeavouring to survey all timbered lands with a view to the cutting out of all those unsuitable for forestry. Considerable areas have been revoked in certain States, while dedications of new areas have resulted in gains to the permanent forest estate.

The area of State forests reserved in perpetuity amounted in June, 1930, to 16,763,056 acres, or 86 per cent. of the area considered possible of permanent reservation in Australia. Of this area a considerable proportion consists of inaccessible mountainous country and cut-over lands, while the Australian area recommended refers to merchantable forest only. The foresters of Australia are, therefore, faced with a difficult task in improving and preserving the existing forests, and in securing the reservation of further suitable forest country to ensure a permanent supply.

The Forestry Departments also control 8,827,238 acres of temporary timber and fuel reserves, but, while these areas contain some land of high value for forestry purposes, the greater part does not justify permanent reservation.

3. **Sylvicultural Nurseries and Plantations.**—Recognition of the necessity for providing by systematic sylviculture for the future softwood timber needs has led to the creation in all of the States of a number of nurseries and plantations. A brief statement showing the locality of these establishments and the nature of their activities will be found in the previous issues of the Official Year Book. (See Official Year Book No. 6, pp. 451-3.) Details regarding forest plantations and the number of persons employed are given hereunder :—

FORESTRY.—AREAS AND EMPLOYMENT, 1935-36.

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
Total area of indigenous forest improved or regenerated .. acres	1,158,689	808,916	178,429	9,906	374,813	..	2,530,753
Total area of Effective Plantations—							
Softwoods .. acres	42,864	43,685	13,810	55,552	20,260	1,150	199,291
Hardwoods .. acres	..	2,500	1,603	5,316	..	..	9,421
Number of persons employed in Forestry Departments—							
Office Staff .. No.	67	44	104	27	37	14	293
Field Staff .. No.	79	140	670	349	(a) 819	22	2,079

(a) Including casual hands.

4. **Revenue and Expenditure.**—The revenue and expenditure of State Forestry Departments from 1931-32 to 1935-36 are given below :—

STATE FORESTRY DEPARTMENTS.—REVENUE AND EXPENDITURE.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
REVENUE.					
	£	£	£	£	£
New South Wales ..	104,674	139,211	166,014	188,471	87,674
Victoria ..	77,189	126,058	179,150	158,608	176,626
Queensland ..	162,246	235,440	293,991	608,935	660,455
South Australia ..	83,714	62,766	82,888	95,730	115,513
Western Australia ..	57,267	65,875	89,895	119,232	143,158
Tasmania ..	8,584	13,229	17,445	23,666	26,904
Total ..	493,674	642,579	829,383	1,194,042	1,210,330

STATE FORESTRY DEPARTMENTS.—REVENUE AND EXPENDITURE—*contd.*

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
EXPENDITURE.					
	£	£	£	£	£
New South Wales ..	(a) 114,151	(a) 132,814	(a) 213,067	(a) 349,119	(a) 179,234
Victoria ..	152,820	136,677	(a) 256,195	165,431	196,279
Queensland ..	(a) 160,311	(a) 175,073	(a) 232,930	420,178	490,928
South Australia ..	117,882	153,566	158,768	170,426	175,913
Western Australia ..	(a) 93,151	(a) 152,748	(a) 171,708	(a) 190,348	(a) 235,180
Tasmania ..	8,764	6,777	8,978	11,118	15,674
Total ..	647,079	793,955	1,041,756	1,306,620	1,299,214

(a) Including expenditure from Unemployment Relief Funds as follows:—1931-32—New South Wales, £7,782; Queensland, £22,650; and Western Australia, £48,454. 1932-33—New South Wales, £25,109; Queensland, £8,515; Western Australia, £131,097. 1933-34—New South Wales, £206,377; Victoria, £93,050; Queensland, £27; Western Australia, £111,500. 1934-35—New South Wales, £336,733; Western Australia, £157,627; 1935-36—New South Wales, £117,008; Western Australia, £183,549.

§ 4. The Australian Forestry School.

The Australian Forestry School situated at Canberra in the Federal Capital Territory was established in 1926 by the Commonwealth Government to meet the demand of the States for an institution which would give a professional training at least equal to that afforded by the recognized forestry schools abroad.

Under existing arrangements the head of the State forestry service may nominate candidates for enrolment at the school. According to the system in vogue in each State, the nomination may be made either at school leaving age or after the candidate has successfully completed the specified university course. In the first case, the youth is helped throughout his university career and is given employment in practical work during the long vacations to test his suitability as a forestry officer; in the second case he is chosen later, and the practical tests are not made until the long vacation immediately preceding his entry to the school. The possession of a nomination by a State government service is not, however, essential for enrolment, since any candidate possessing the necessary qualifications will be accepted for the diploma course, and in special cases applicants desirous of studying a particular branch of forestry will be required to follow certain lectures only. Refresher or post graduate courses are arranged to meet the needs of senior foresters.

A candidate for enrolment in the diploma course must possess—(a) a degree of a University, or (b) a certificate that he has completed the special two years' preliminary course at a University.

The qualifications for enrolment may be waived to assist an applicant of exceptional ability with a record of long service in a State Forestry Department, who has been specially recommended by the head of that service. Such applicants must show proof of education equal to that required for a school leaving certificate.

The course of instruction extends over three years, the first two of which are spent at the school, and the third in one of the forestry services of Australia.

The Commonwealth diploma of forestry is awarded to students on the following conditions:—(a) Successful completion of theoretical course; (b) Satisfactory field work during the course; and (c) One year's satisfactory practical forestry work following the school course.

Students who have passed the approved two-year preliminary science course at the Universities of Adelaide, Melbourne, Western Australia or Queensland, and two years of Diploma course at the School, may be granted the degree B.Sc.F. by their Universities, subject to certain conditions laid down, particulars of which may be obtained from the Registrar of the University concerned.

§ 5. Forest Congresses.

Reference to the various Forestry Conferences held in Australia and elsewhere will be found in Official Year Book No. 22, p. 743, but owing to limitations of space, the information cannot be repeated herein. The Third British Empire Forestry Conference was held in Australia and New Zealand in 1928, and the Fourth in South Africa in 1935. Publications issued in connexion with these Conferences are available on application to the various State and Commonwealth forestry authorities.

§ 6. Forestry Production.

1. Timber.—Particulars regarding the production of sawn timber from forest sawmills in each State for the year 1935-36 are shown in the following table:—

SAWMILL OUTPUT OF NATIVE TIMBER, 1935-36.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A. (a)	Tas.	Total.
LOGS MILLED.							
Hardwood—							
Quantity cub. ft.	11,934,086	(b)	68,108,560	615,423	27,333,220	(b)	(b)
Value.. £	427,919	(b)	469,138	10,234	373,613	(b)	(b)
Softwood—							
Quantity cub. ft.	6,384,571	(b)	8,722,141	1,713,596	38,601	(b)	(b)
Value.. £	233,139	(b)	642,202	32,737	(d)	(b)	(b)
Total—							
Quantity cub. ft.	18,318,657	(b)	16,830,701	2,329,019	27,371,821	(b)	(b)
Value.. £	661,058	(b)	1,111,340	42,971	373,613	(b)	(b)

SAWN TIMBER PRODUCED.

Hardwood—							
Quantity sup. ft.	87,805,605	105,866,503	42,205,004	3,493,360	100,111,575	60,804,342	415,477,169
Value.. £	2,499,525	722,397	550,004	39,064	895,452	423,840	3,400,213
Softwood—							
Quantity sup. ft.	45,536,746	68,400	71,144,013	9,364,364	162,433	859,513	127,135,469
Value.. £	484,336	717	1,048,073	84,871	2,475	23,669	1,644,141
Unspecified—							
Quantity sup. ft.	..	..	11,829,006	..	..	8,758,616	20,587,622
Value.. £	..	..	268,354	..	..	53,323	321,877
Total—							
Quantity sup. ft.	133,342,441	105,934,903	125,269,013	12,857,724	109,374,008	76,422,471	563,200,560
Value.. £	1,348,392	719,714	1,872,431	124,735	867,927	507,032	5,434,231

(a) Excluding timber amounting to 45,671,500 sup. feet, valued at £103,374, produced elsewhere than in forest sawmills. (b) Not available. (c) Including logs unspecified.

(d) Included with hardwood.

The next table gives the sawmill output of native timber in each State for 1923-24, 1928-29 and for the last three years:—

SAWMILL OUTPUT OF NATIVE TIMBER.

State.	1923-24.	1928-29.	1933-34.	1934-35.	1935-36.
	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.
New South Wales	167,493	136,051	91,032	122,604	133,342
Victoria	134,639	79,018	81,079	97,110	105,935
Queensland	141,672	106,862	75,043	116,818	125,269
South Australia	1,350	3,219	9,919	11,710	12,858
Western Australia	161,749	145,043	65,092	87,237	109,374
Tasmania	63,120	49,195	47,732	66,809	76,422
Total	670,023	516,388	369,897	502,288	563,200

In addition to the sawn timber shown in the table, a large amount of other timber, e.g., sleepers, piles, poles, fencing material, timber used in mining, and fuel, is obtained from forest and other lands. Complete information in regard to the volume of this

output is, however, not available. In Western Australia, particulars are obtained of the quantities of timber hewn by contractors for the Railway Department, mines, etc., as well as of the quantities produced by other agencies outside forest sawmills, but the figures have not been included in the preceding two tables. The quantities so produced in the last five years were as follows:—1931-32, 16,831,214 sup. feet; 1932-33, 12,441,946 sup. feet; 1933-34, 31,335,186 sup. feet; 1934-35, 43,259,941 sup. feet; and 1935-36, 45,614,500 sup. feet. The annual reports of the Forest Departments in each State contain particulars concerning the output of timber from areas under departmental control, but owing to lack of uniformity in measurements accurate determination of total production cannot be made. Efforts, however, are being made to obtain more comparable information. Moreover, there is a fair quantity of hewn timber produced from privately owned land, but information regarding output is not available.

2. Other Forest Products.—(i) *Eucalyptus Oil*. Oil may be distilled from the foliage of all varieties of eucalyptus, and several of them furnish a product widely known for its commercial and medicinal uses. Complete information regarding Australian production and consumption of eucalyptus oil is not available, but large quantities are manufactured, particularly in Victoria. Oversea exports amounted in 1931-32 to £40,077; in 1932-33 to £40,075; in 1933-34 to £41,010; in 1934-35 to £50,699; and in 1935-36 to £53,797, the bulk of the product being shipped from Victoria to the United Kingdom, the United States and Germany. Large quantities of the crude oil are used locally in flotation processes in connexion with the recovery of gold and other minerals.

(ii) *Sandalwood and Sandalwood Oil*. The distillation of oil from Western Australian sandalwood has been characterized by improvement both in quality and in quantity within recent years. It is claimed that the Western Australian oil is at least as valuable medicinally as the well-known Mysore oil, besides having an extensive use in the manufacture of perfumes. Exports of essential oils from Western Australia amounted in 1930-31 to £56,170; in 1931-32 to £50,301; in 1932-33 to £26,331; in 1933-34 to £26,720; in 1934-35 to £35,363; and in 1935-36 to £27,520. The bulk of the product consisted of sandalwood oil which was shipped principally to the United Kingdom, Eastern States of Australia and Germany. In addition to its distillation, quantities of sandalwood are gathered for export each year. Western Australia is the chief source of supply, followed by South Australia, while Queensland also produces a small quantity. In 1935-36, 2,352 tons valued at £60,845 were exported, the whole of which was shipped to the East; Hong Kong 1,209 tons and China 932 tons were the principal countries of destination. A table giving these details is included in § 8 hereinafter.

(iii) *Grass Tree or Yacca Gum*. South Australia is the chief State producing this gum which is used in the preparation of varnishes and lacquers. Quantities are also obtained in New South Wales and Western Australia but these are small. The production in South Australia during 1935-36 amounted to 2,005 tons, whilst the exports from Australia amounted to 1,982 tons valued at £0,442 during the same period.

(iv) *Tan Barks*. The forests of Australia are capable of yielding a wealth of tanning materials; many species of eucalyptus and other genera contain varying proportions of tannin, chiefly in the bark, but also in the wood and twigs. Although many of these species contain higher percentages of tannin than is found in the bark of oak, chestnut and hemlock, formerly the chief source of tannin material in the northern hemisphere, scattered distribution has resulted in the richest tan-bearing species only being used in Australia. These are:—Golden wattle (*Acacia pycnantha*), black or green wattle (*Acacia decurrens* or *mollissima*), and mallet (*Eucalyptus asstringens*).

In pre-war days the production of wattle bark was more than sufficient for local requirements, and an export trade was built up. The supply diminished during the six years ending 1926-27, and Australia imported on the average about 2,900 tons each year from Natal, where the plantations were originally started from Australian seed. Since 1927-28, however, exports exceeded imports, averaging 2,635 tons valued at £25,538 during the five years ending 1935-36. The chief exporting States are South Australia, Tasmania and Western Australia. This matter is referred to in tables appearing in § 8 hereinafter. The other valuable tan bark, mallet (*Eucalyptus asstringens*) of Western Australia, is not extensively used in Australian tanneries, but it is exported to Europe

and other countries, where it is used for producing a tannin extract. A brief account of the work done by the Council for Scientific and Industrial Research in connexion with tanning materials will be found in Official Year Book No. 22, page 743. The production of extract from the bark of karri (*Eucalyptus diversicolor*), of which very large quantities are available at karri sawmills, has passed the experimental stage, and private enterprise has started production on a commercial scale. The experimental work in kino impregnated marri (*Eucalyptus calophylla*) bark is not yet complete. The production of tan bark in Australia is estimated to exceed 25,000 tons per annum.

3. Value of Production.—As the outcome of a series of conferences of Australian Statisticians it is now possible to present the value of forestry production on a much more satisfactory basis than was possible hitherto. Provision is made for the inclusion of all phases of forestry output, including forest sawmills, the production of logs, poles, piles, sleepers and other hewn timber, firewood, sandalwood and gums and resins. It has not been possible within the time allowed to collect all of these items and consequently the values are understated in some of the States, but the deficiency is not serious.

GROSS, LOCAL AND NET VALUE OF FORESTRY PRODUCTION, 1935-36.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.	Value of Other Materials Used in Process of Production.	Net Value of Production.(a)
	£	£	£	£	£
New South Wales ..	2,126,000	112,000	2,014,000	..	2,014,000
Victoria ..	908,579	216,370	692,209	..	692,209
Queensland ..	2,329,000	253,000	2,076,000	..	2,076,000
South Australia ..	532,748	6,812	525,936	..	525,936
Western Australia ..	1,326,715	163,822	1,162,893	27,042	1,135,851
Tasmania ..	418,120	54,520	363,600	..	363,600
Total { 1935-36	7,641,162	806,524	6,834,638	27,042	6,807,596
{ 1934-35	7,331,693	597,494	6,494,139	20,791	6,437,348
{ 1933-34	5,853,862	716,712	5,137,150	..	5,137,150

(a) No account has been taken of maintenance costs and depreciation.

NOTE.—The relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been attained.

4. Employment.—The number of persons employed in forestry operations as revealed by the Census of the Commonwealth of Australia at the 30th June, 1933, is shown in the following table. With the exception of those employed in forest sawmills referred to in Chapter XXIV, no later details are available.

EMPLOYMENT IN FORESTRY, 30th JUNE, 1933.

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total. (a)
	No.	No.	No.	No.	No.	No.	No.
Males ..	6,446	7,225	4,054	1,549	4,189	2,376	25,839
Females ..	38	29	27	8	7	5	114
Total ..	6,484	7,254	4,081	1,557	4,196	2,381	25,953

(a) Not including Northern Territory, 11, and Federal Capital Territory, 152.

§ 7. Commercial Uses of Principal Australian Timbers.

1. General.—The uses of the more important Australian timbers are many and various, and are indicated in previous issues of this work. (See Official Year Book No. 6, pp. 454-6; and Official Year Book No. 10, Section III., § 7 and 8.)

A list of Australian timbers best known on the local markets appeared in Official Year Book No. 20, p. 713. [Further references are made in "Timber and Forest Products of Queensland" (E. H. F. Swain), published in 1928.]

2. **Lack of Uniformity in Nomenclature:**—Unfortunately the vernacular names applied to the gums, ironbarks, etc., in the various States, and even in different parts of the same State, do not always refer to identical timbers. The resulting confusion has not only been productive of loss, but it has, to some extent, prejudicially affected the timber trade. This subject is referred to at some length in the special article "Australian Eucalyptus Timbers" in Section III., § 7 and 8, in Official Year Book No. 10. At the Forestry Conferences previously mentioned, the matter came up for special consideration, and steps were taken to establish a uniform nomenclature.

§ 8. Oversea Trade.

1. **Imports.**—(i) *Dressed Timber.* The quantity and value of timber imported into Australia during the four years 1932-33 to 1935-36 inclusive are shown according to countries of origin in the following tables:—

DRESSED TIMBER.—IMPORTS, AUSTRALIA.

Country of Origin.	Quantity.				Australian Currency Values.			
	1932-33.	1933-34.	1934-35.	1935-36.	1932-33.	1933-34.	1934-35.	1935-36.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£
United Kingdom ..	4,814	21,133	21,839	369	735	1,536	2,075	34
Canada ..	257,371	4,672,603	2,730,082	4,381,411	2,775	36,064	26,896	44,625
Other British Countries ..	7,374	10,246	38,350	208,443	153	94	1,225	2,910
Norway ..	5,457,889	4,510,936	4,688,155	5,972,177	44,446	42,499	46,646	53,670
Sweden ..	4,647,179	3,803,010	3,911,008	2,041,848	42,226	37,538	38,794	18,199
U.S. of America ..	763	1,105,408	2,698,135	1,037,157	41	8,334	23,116	13,891
Other Foreign Countries ..	709,255	1,019,977	742,195	1,967,025	9,203	13,733	11,835	18,379
Total ..	11,084,645	15,143,313	14,838,770	16,128,430	99,579	139,708	150,587	151,808

The figures in the table above are exclusive of items such as architraves, veneers, etc., quantities for which are either not shown, or are expressed in dissimilar units in the Customs entries. The total value of the items so excluded amounted to £79,743 in 1935-36 including plywood, veneered or otherwise, £21,700.

The bulk of the imports of dressed timber comes from Norway, Sweden and Canada. Practically the whole of this timber consists of softwoods—deal and pine—used for lining, weatherboards, flooring, shelving, doors, box-making, etc.

(ii) *Undressed Timber.* Australian imports of undressed timber for the years 1931-32 to 1935-36 are given hereunder:—

UNDRESSED TIMBER, INCLUDING LOGS.(a)—IMPORTS, AUSTRALIA.

Country of Origin.	Quantity.					Australian Currency Values.				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	sup. ft.	sup. ft.	sup. ft.	sup. ft.	sup. ft.	£	£	£	£	£
United Kingdom ..	1,000	1,000	1,000	1,000	1,000	8,111	13,933	11,505	20,342	15,066
Canada ..	75,906	135,016	184,809	214,927	93,010	352,720	569,311	610,097	702,747	825,777
India ..	38	42	17	93	101	1,695	2,139	863	3,856	4,299
Malaya (British) ..	93	131	99	103	101	842	1,122	772	735	730
New Zealand ..	23,181	25,653	26,784	38,702	36,997	296,538	315,922	326,102	508,658	452,107
Other British Countries ..	1,177	1,751	2,100	4,308	3,000	12,813	11,280	11,400	28,055	34,212
Japan ..	312	694	1,334	916	1,180	3,371	7,429	17,365	12,584	14,166
Netherlands East Indies ..	20	178	7	2	41	181	..	182	104	185
Norway ..	28	..	236	705	33	100	..	2,149	7,472	237
New Caledonia ..	140	..	..	..	..	1,587	1,410	..	..	..
Philippine Islands ..	93	710	2,702	4,580	3,049	670	6,432	21,381	41,394	37,138
Sweden ..	538	1,872	1,043	3,180	2,731	4,482	14,076	15,802	28,742	10,778
U.S. of America ..	18,793	20,841	21,379	38,717	39,803	110,395	150,433	212,472	204,023	341,432
Other Foreign Countries ..	1,408	1,641	1,730	2,745	5,015	9,161	5,423	14,895	20,442	31,307
Total ..	121,808	188,664	243,676	308,002	358,148	802,814	1,107,726	1,256,027	1,699,044	1,774,124

(a) Exclusive of timber not measured in super. feet.

By far the larger proportion of the undressed timber imports consists of softwoods such as oregon, redwood, hemlock, western red cedar and yellow pine from the United States and Canada; kauri, rimu and white pine from New Zealand; and red and white deals from Norway and Sweden. Amongst the hardwoods imported the principal are oak from the United States of America and Japan, and furniture woods from the Pacific Islands.

2. Exports.—(i) *Undressed Timber*. The quantity and value of undressed timber exported from 1931-32 to 1935-36 are given below, the countries of destination being also shown:—

UNDRESSED TIMBER. INCLUDING LOGS.(a)—EXPORTS, AUSTRALIA.

Country to which Exported.	Quantity.					Value(b).				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	1,000 sup. ft.	1,000 sup. ft.	1,000 sup. ft.	1,000 sup. ft.	1,000 sup. ft.	£	£	£	£	£
United Kingdom ..	13,002	7,918	8,293	12,196	12,875	152,580	109,872	101,692	142,066	147,530
Canada ..	41	39	156	103	140	697	622	2,539	1,920	2,565
Ceylon ..	6,700	2,455	1,184	764	635	65,952	21,930	12,311	7,643	6,353
Hong Kong ..	355	2,766	102	33	..	2,126	20,343	1,019	200	..
India ..	33	4	..	7	438	342	44	..	114	4,514
Malaya (British) ..	17	..	2	83	..	456	..	20	877	..
Mauritius ..	408	624	421	276	432	4,093	4,575	4,259	2,777	4,738
New Zealand ..	7,614	3,182	6,349	9,991	12,842	82,202	40,185	77,557	126,089	160,382
Pacific Islands—										
Fiji ..	515	506	414	555	727	7,488	7,037	6,136	8,658	10,832
Gilbert and Ellice Islands Colony ..	77	39	29	17	38	1,330	711	635	286	716
Papua ..	90	165	52	93	139	1,673	1,968	823	1,416	2,344
Solomon Islands ..	48	65	54	72	94	1,002	1,169	946	1,207	1,532
Territory of New Guinea ..	454	99	146	145	187	4,906	1,254	1,970	2,011	2,355
Other Islands ..	109	68	88	47	53	1,936	1,232	1,433	817	867
Union of South Africa ..	8,661	3,403	2,914	5,438	5,399	83,368	38,092	33,285	62,047	64,957
Other British Countries ..	21	278	..	18	18	297	2,968	..	173	211
Africa, Portuguese ..	193	1,096	1,295	1,852	574	2,343	11,844	14,372	21,104	7,271
East ..	615	573	412	528	1,078	6,132	5,746	4,257	5,686	11,181
Belgium ..	3,704	684	180	1,621	1,153	23,710	5,308	1,719	16,227	11,504
China ..	..	144	31	187	392	..	1,444	357	1,871	3,919
Egypt ..	176	143	165	448	236	1,860	1,470	1,767	5,048	2,625
Germany ..	38	2	..	..	..	809	39	..	..	..
Japan ..	1,036	716	376	307	73	10,491	6,942	3,894	3,466	974
Netherlands ..	..	..	..	..	..	..	..	..	..	..
Pacific Islands—										
New Caledonia ..	4	4	72	85	210	76	57	1,115	1,435	3,412
New Hebrides ..	15	9	16	19	39	259	165	278	355	477
Other Islands ..	32	6	16	80	15	580	136	355	1,932	343
United States of America ..	3,018	404	916	1,656	2,445	42,280	6,449	18,875	37,335	63,081
Other Foreign Countries ..	1(c)	1,117	33	290(c)	75	2(c)	11,207	331	2,901(c)	1,339
Australian Produce ..	47,037	26,509	23,716	36,911	40,307	499,008	302,809	291,945	455,661	516,022
Other Produce ..	380	386	413	580	812	4,170	4,011	3,377	4,658	6,160
Total ..	47,417	26,895	24,129	37,491	41,119	503,178	306,820	295,121	460,319	522,181

(a) Exclusive of Timber not measured in super. feet.

(b) Australian currency values.

(c) Includes Iraq, 1,007,000 super. feet, £10,071, in 1932-33, and 10,127 super. feet, £207, in 1935-36.

The bulk of the exports of undressed timber was consigned to South Africa, New Zealand and the United Kingdom, and consisted largely of the Western Australian hardwoods, jarrah and karri, which have earned an excellent reputation for such purposes as railway sleepers, harbour works, wood paving, etc. Considerable quantities of pole, pile and girder timber are also exported from New South Wales to New Zealand.

(ii) *Sleepers*. Prior to the year 1933-34 particulars of the quantity and value of sleepers exported were included in the table relating to Undressed Timber, including Logs. These details have been separated in the export returns and are now shown in the following table:—

SLEEPERS—RAILWAY.—EXPORTS, AUSTRALIA.

Country to which Exported.	Quantity.		Value.(a)	
	1934-35.	1935-36.	1934-35.	1935-36.
	sup. ft.	sup. ft.	£	£
United Kingdom	32,400	..	379	..
Ceylon	2,100,288	368,700	21,002	3,263
Hong Kong	2,566,191	90,690	18,694	680
Mauritius	694,584	..	6,944	..
New Zealand	8,998,876	8,538,619	64,520	69,475
Pacific Islands	92,032	178,249	1,039	2,394
Union of South Africa ..	4,318,242	7,528,343	40,773	74,276
Other British Countries ..	132,432	1,167,278	1,324	9,962
Africa, Portuguese East ..	520,665	98,508	5,096	1,018
China	13,393,504	4,986,036	115,361	49,631
Egypt	3,099,624	8,245,968	30,997	82,460
Iraq	1,364,664	2,174,999	13,647	21,401
Persia .. ..	..	1,437,024	..	14,370
Total	(b)37,313,502	(c)34,814,414	319,776	328,930

(a) Australian currency values.
1,290,064.

(b) Number of sleepers, 1,333,141.

(c) Number of sleepers,

3. Classification of Imports and Exports.—(i) *General*. The quantities of timber classified according to varieties imported and exported during the year 1935-36 are given in the next table:—

TIMBER, VARIETIES IMPORTED AND EXPORTED.—QUANTITIES, AUSTRALIA, 1935-36.

Description.	Unit of Quantity.	Imports.	Exports.	Excess of Imports over Exports.
Dressed	sup. ft.	16,128,430	982,092	15,146,338
Undressed, including logs ..	"	358,148,252	41,110,567	317,028,685
Sleepers	"	(c)	34,814,414	-34,814,414
Architraves, mouldings, etc. ..	lin. ft.	40,252	78,316	-20,064
Plywood, veneered or otherwise ..	sq. ft.	2,706,675	(b)	2,706,675
Palings	No.	..	133,668	-133,668
Shingles	"	770,190	..	770,190
Staves—				
Dressed, etc.	"	632,665	..	632,665
Undressed	"	1,008,066	..	1,008,066
Laths—				
For blinds .. ..	"	..	..	..
Other	"	209,790	179,860	29,930
Doors	"	3	(a)	(a)
Wood pulp	ton	37,186	(b)	37,186
Veneers	"	(a)	(a)	(a)
Spokes, rims, felloes, etc. ..	"	(a)	(a)	(a)
Other	"	(a)	..	(a)

(a) Quantity not available.
recorded separately.

(b) Exports not recorded separately.

(c) Imports not

NOTE.—The minus sign (—) denotes an excess of exports.

Similar particulars relative to the values of imports and exports during the year 1935-36 are shown hereunder:—

TIMBER, VARIETIES IMPORTED AND EXPORTED.—VALUES, (b) AUSTRALIA. 1935-36.

Description.	Imports.	Exports.	Excess of Imports over Exports.
	£	£	£
Dressed	151,808	13,984	137,824
Undressed, including logs	1,774,125	522,191	1,251,934
Sleepers	(c)	328,930	-328,930
Architraves, mouldings, etc.	377	557	-180
Plywood, veneered or otherwise	21,701	(a)	21,701
Palings .. .. .	..	1,357	-1,357
Shingles	1,296	..	1,296
Staves—			
Dressed, etc.	30,326	..	30,326
Undressed	13,527	..	13,527
Laths—			
For blinds .. .. .	..	..	..
Other	263	444	-181
Doors	80	648	-568
Wood pulp	317,503	(a)	317,503
Veneers	22,834	18,965	3,869
Spokes, rims, felloes, etc.	90	1,393	-1,303
Other	6,512	..	6,512
Total	2,340,442	888,469	1,451,973

(a) Exports not recorded separately.

(b) Australian currency values.

(c) Imports not recorded separately.

NOTE.—The minus sign (—) denotes an excess of exports.

(ii) *Sandalwood.* A considerable quantity of sandalwood is exported, principally from Western Australia to Hong Kong and China, where it is highly prized and largely used for artistic and ceremonial purposes. Particulars for the last five years are as follows:—

SANDALWOOD.—EXPORTS. AUSTRALIA.

Country to which Exported.	Quantity.					Value.(a)				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	ton.	ton.	ton.	ton.	ton.	£	£	£	£	£
Hong Kong	1,286	3,481	2,309	2,390	1,208	38,068	95,575	64,735	70,007	32,842
India	209	144	203	112	75	6,270	4,311	6,216	3,475	2,330
Malaya (British)	115	99	168	112	99	3,370	2,923	5,115	3,409	2,997
Other British Countries	7	15	11	17	12	213	450	340	543	351
China	649	715	1,212	1,025	932	12,651	20,413	36,358	30,773	27,513
Other Foreign Countries	78	(b)400	(c) 50	14	26	2,342	(b)9,285	(c)1,537	434	803
Total	2,344	4,854	3,953	3,670	2,352	62,914	132,657	114,301	108,641	66,845

(a) Australian currency values.

(b) Includes 386 tons £8,865 to Japan.

(c) Includes 31 tons

£953 to Japan.

(iii) *Tan Bark.* Tan bark figures both as an export and an import in the Australian trade returns. The table hereunder refers to exports :—

TAN BARK.—EXPORTS, AUSTRALIA.

Country to which Exported.	Quantity.					Value.(a)				
	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	cwt.	cwt.	cwt.	cwt.	cwt.	£	£	£	£	£
United Kingdom ..	2,298	..	..	..	305	978	..	..	..	162
New Zealand ..	41,260	35,795	26,387	33,810	20,001	19,570	17,777	13,636	16,536	9,482
Other British Possessions ..	20	2	..	40	..	9	1	..	26	..
Germany ..	35,441	21,333	3,206	6,007	1,517	17,133	10,041	2,273	2,356	1,101
Other Foreign Countries ..	10,042	19,464	11,757	40	1,041	4,599	8,073	5,340	16	914
Total ..	89,061	76,594	41,350	39,897	23,764	42,289	35,892	21,240	18,936	11,659

(a) Australian currency values.

The exports of tan bark from Australia during recent years consisted largely of mallet bark from Western Australia. The shipments of this bark are not so large as in pre-war days owing to the cutting out of supplies. A vigorous policy of reforestation was put into operation and, as a result, a considerable improvement in exports has taken place concurrent with a diminution of imports of similar materials. For the twelve years prior to 1927-28, Australia had to import large quantities of tanning bark, but since then imports have dwindled to negligible quantities. During the year 1935-36 the chief exporting States were Tasmania, South Australia and Western Australia, these States providing 39 per cent., 37 per cent. and 15 per cent. respectively of the total quantities shipped.

A comparison of the imports and exports of tan bark during the last five years is given in the next table :—

TAN BARK.—IMPORTS AND EXPORTS, AUSTRALIA.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	cwt.	cwt.	cwt.	cwt.	cwt.
QUANTITIES—					
Imports	21	200	1	2,556	4,362
Exports	89,061	76,594	41,350	39,897	23,764
Excess of exports over imports	89,040	76,394	41,349	37,341	19,402
VALUES (a)—	£	£	£	£	£
Imports	13	101	1	827	1,395
Exports	42,289	35,892	21,249	18,936	11,659
Excess of exports over imports	42,276	35,791	21,248	18,109	10,264

(a) Australian currency values.

The imports consist almost exclusively of wattle bark from the plantations in South Africa. One variety of Australian wattle is found to flourish in the sandy belts near the coast, but it is the *Acacia decurrens*, var. *mollis*, which is chiefly relied upon for the

production of wattle bark in the South African plantations. Seed has been tried from New South Wales, Tasmania and Victoria, but it is stated that most of the seed is obtained from the best wattle bark areas in eastern Tasmania and western Victoria.

Two reasons are given to account for the success of the industry in the Union of South Africa:—(a) It is found that the treeless, grassy highlands of Natal are specially suitable for wattle culture, and the trees can therefore be grown in rows and economically attended to, while the necessary bark sheds and other appurtenances can be placed in the most advantageous positions; and (b) there is an abundance of cheap and efficient native labour.

(iv) *Other Tanning Substances.* Considerable quantities of tanning substances other than bark are annually imported into Australia. The total value of the importations in 1935-36 was £55,255, and was composed as follows:—Wattle bark extract, £1,359; quebracho extract, £17,143; other extract, £11,552; and valonia, myrobalans, cutch, etc., £25,801.

CHAPTER XXIII.

FISHERIES.*

§ 1. General.

1. *Fish Stocks*.—Australia possesses an abundant and varied fish fauna, which embraces both tropical and temperate varieties and includes destructive as well as valuable species. In rivers and lakes both indigenous and imported varieties thrive. The latter have been introduced and acclimatized for industrial and sporting purposes by Governments and angling societies. Exploitation of the fishing areas is controlled by governmental authority. In some cases the minimum size of the fish to be taken is fixed, and in other cases the taking of some kinds is prohibited during periods prescribed according to the necessity.

2. *Progress of Industry*.—(i) *Transport and Marketing*. Despite the abundance of edible fish, the progress of the fishery industry in Australia has been slow, the difficulties of transport and marketing of the proved supplies presenting the chief obstacles.

In New South Wales, as shown in § 5 herein and § 6 of this Chapter in Official Year Book No. 17, the matter of exploiting trawlable fish was undertaken by the State Government, which also took steps to improve the conditions under which ordinary coastal fishing is carried on. In Queensland, State trawling was undertaken in 1919, and good trawling areas have been located and charted between Cape Moreton and Caloundra.

(ii) *Economic Investigations*. Although valuable work has been carried out by the State Governments in the way of experiment and culture, much yet remains to be done before the industry is at all commensurate in extent with the industrial progress or consuming capacities of Australia. All live fish imported into Australia are examined on shipboard in order to prevent the importation of undesirable fish. With the object of ascertaining the movements of oceanic fishes, and of estuarine fishes which make periodical oceanic migrations, reports are furnished regarding the various kinds of fishes, etc., and their movements along the coast. Details regarding the activities of the States in fish-culture were given in Official Year Book No. 6, pp. 471-2. By arrangement with the Commonwealth Fisheries Department some years ago members of the staff of the Australian Museum, Sydney, accompanied the F.I.S. *Endeavour* on various cruises. Specimens were collected, mounted for scientific purposes, and distributed to other Australian Museums, a considerable number being put aside for the Commonwealth Fishery Museum. As pointed out in § 4, however, this vessel was lost with all hands in 1914.

With the object of reviewing the potentialities of the fishing industry of Australia the Development and Migration Commission convened a meeting of State and Commonwealth representatives. The Conference, which was held in Melbourne during September, 1927, affirmed:—

- (1) The importance of establishing a Marine Biological Institution to study the scientific problems connected with Australian fisheries, and to collect and disseminate authoritative information and give advice on matters concerning the fisheries.
- (2) The desirability of establishing an experimental trawling unit to explore the fisheries resources of Australia.

* A specially contributed article dealing with the Marine and Fresh Water Fisheries of Australia appeared as § 6 of this Chapter in Official Year Book No. 17 (*vide* pp. 754 to 757 therein).

Committees were formed to deal with important problems concerning the preservation, transportation, marketing and distribution of fish, the canning and curing of fish, the production of fish by-products, the factors of destruction in fisheries, the development of the oyster industry, etc. The reports prepared by these Committees were submitted to a further conference held in July, 1920, at which the Commonwealth Government and all State Governments were represented: it was then unanimously recommended that investigation work should be undertaken by the Commonwealth Government. The Commonwealth Government is providing a sum of £80,000, spread over a period of five years to cover fishery research and investigation under the following main heads:— (i) to procure a vessel specially designed for the exploration of pelagic or surface-swimming fish, but which could also carry out certain investigations of demersal or bottom-dwelling species, (ii) to undertake experiment in the canning of fish and the determination of the chemical composition of fish thought to be suitable for the manufacture of fish by-products, (iii) the determining, by tests, of the best methods of curing and preserving fish, especially the more common varieties, and (iv) in co-operation with the State authorities, to undertake a study of the systems of distribution of fish in each State with a view to the improvement of existing transport and marketing facilities. A tender for the construction of a trawler at a cost of £17,000 has been accepted and it is anticipated that the vessel will be in commission during December, 1937.

A Commonwealth Director of Fisheries, who will be entrusted with the task of carrying out these investigations, has been appointed for a period of five years. Other steps have been taken to initiate action according to the programme outlined above including the building up of a staff of trained investigators. It is hoped that, as a result of the knowledge gained from this investigation, the fishery industry of Australia will develop more in keeping with the advancement made by other branches of production.

3. Consumption of Fish.—It has been said that the Australians are not fish-eating people, seeing that the annual consumption of fish per head of population in Great Britain is set down at 42 lb., while in Australia it has been estimated at only 13 lb. There are frequent complaints that the distribution service does not give the public adequate opportunity to satisfy its appetite for a fish diet.

4. Oyster Fisheries.—Natural oyster beds exist on the foreshores in the shallow waters of inlets and estuaries in several parts of Australia. By husbanding the natural crop, and by judicious transplanting, the output has been very materially augmented. The areas are leased by the Government to private persons, lengths of foreshore being taken up under oyster leases. In New South Wales and Queensland the industry has thriven, and small yields are obtained in South Australia, Victoria and Tasmania.

5. Pearl-Shell, Pearls, Bêche-de-Mer, etc.—(i) *General.* Pearl-shelling is carried on in the tropical waters of Queensland, the Northern Territory and Western Australia. The pearl oyster inhabits the northern and western coastal waters from Cape York to Shark Bay, a length of shore of over 2,000 miles. The shells are marketed in considerable quantities, and pearls are obtained in Queensland, Western Australia and the Northern Territory. The fishing is generally conducted with the aid of diving apparatus in water varying from 4 to 20 fathoms in depth. In Queensland and the Northern Territory the bêche-de-mer industry is carried on, and tortoise-shell is obtained on the coasts. Experiments have been made in cultivating the pearl oyster on suitable banks. In October, 1911, a pearl weighing 178 grains, and valued at £3,000, was obtained at Broome. Further details regarding pearl-shelling are given in Official Year Book No. 6, p. 463. Trochus-shell to the value of £32,532, £49,525, £41,596, £53,619 and £60,424 was exported from Australia during 1931-32, 1932-33, 1933-34, 1934-35 and 1935-36 respectively.

(ii) *Royal Commission on Pearl-shelling Industry.* In accordance with the "White Australia" policy it was originally determined that the employment of Asiatic labour in the pearl-shelling industry should be restricted, and ultimately cease, and it was proposed that after 31st December, 1913, permits to bring in Asiatics for the pearling fleet should no longer be issued. In view, however, of the disorganization of the industry occasioned by the war, the time was extended to the 30th June, 1918, after which date permits to introduce Asiatic labour were to be granted only in cases where the diver and tender of a

boat were Europeans. The Royal Commission appointed in March, 1912, presented its final report in 1916. The Commissioners stated that, though it might be practicable, they did not consider it advisable or profitable to attempt to transfer the industry from Asiatics to Europeans. They further stated that, while the labour employed is almost entirely Asiatic, they did not consider that the "White Australia" policy would be weakened or imperilled by allowing the industry to continue as then conducted.

(iii) *Tariff Board Inquiry.* Arising from an application for the payment of a bounty on pearl shell gathered by fishing vessels registered in Australia, the industry was the subject of an inquiry by the Tariff Board which presented its report in 1935. The Board did not approve the granting of a bounty but recommended some relief to the industry in the form of the remission of primage and customs duty.

§ 2. The Fishing Industry.

1. Boats and Men Engaged, and Take.—(i) *General Fisheries.* The returns have been compiled from particulars supplied by the State Departments, and while the data do not generally lend themselves to presentation on a uniform basis, the principal facts have been incorporated in the tables hereunder:—

GENERAL FISHERIES, 1935-36.

State or Territory.	No. of Boats Engaged.	Value of Boats and Equip-ment.	No. of Men Em-ployed.	Total Take of—		Gross Value of Take.	
				Fish.	Spiny Lobster (Crayfish).	Fish.	Spiny Lobster (Crayfish).
	No.	£	No.	cwt.	doz.	£	£
New South Wales(a)	1,622	110,974	(c) 2,724	211,304	14,532	589,172	(d) 67,711
Victoria ..	764	98,940	1,305	112,752	14,584	184,405	12,396
Queensland ..	823	70,027	1,702	(e) 73,620	9,032	149,875	f(g) 5,641
South Australia(a)	(h) 900	h 145,000	(h) 1,375	(h) 107,000	(i)	(h) 180,000	(j)
Western Australia(b)	257	55,057	545	14,381	6,373	40,268	(k) 3,600
Tasmania(a) (l) ..	221	55,750	305	20,930	55,420	36,670	27,710
Northern Territory	2	480	7	180	..	495	..
Total ..	4,589	536,228	7,963	540,167	99,941	1,180,885	117,058

(a) Year ended December, 1935. (b) Six months ended December, 1935. (c) Fishermen's licences issued. (d) Including *Eschschsch*, the value of 1,885 cwt. of prawns and 1,040 dozen crabs. (e) Includes prawns. (f) Crabs. (g) Including 23 turtles valued at £8. (h) Estimate. (i) Not available. (j) Included with fish. (k) Including prawns £909, crabs £34 and turtles £200. (l) Includes oyster fisheries.

Returns for Australia for the last five years are given in the table below:—

GENERAL FISHERIES.—AUSTRALIA.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
No. of boats engaged ..	..	4,657	4,348	4,278	4,589
No. of men employed ..	..	9,076	8,656	8,405	7,903
Fish obtained—					
Quantity ..	cwt.	562,230	568,324	561,035	557,214
Gross value ..	£	1,166,338	1,183,081	1,151,812	1,159,808
Lobsters obtained—Gross value £		118,129	118,183	112,400	112,320
					117,058

(a) Exclusive of South Australia. *Vide* footnotes to previous table.

(ii) *Edible Oyster Fisheries.* Edible oyster fisheries are of small dimensions outside New South Wales and Queensland. During 1935-36 the available returns show the following takes:—New South Wales, 51,777 cwt., value £08,055; Queensland, 10,644 cwt., value £13,302. In Tasmania the scallop is far more important than the oyster. In 1935 the scallops taken in Tasmania were valued at £0,050.

Returns for Australia for the last five years are given in the appended table :—

EDIBLE OYSTER FISHERIES.—AUSTRALIA.

Particulars.	1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36.
No. of boats engaged	724	727	662	665	699
No. of men employed	681	716	666	675	687
Oysters obtained—					
Quantity cwt.	50,350	63,825	57,824	58,678	63,501
Gross value (b) £	76,108	94,641	77,590	78,287	89,989

(a) Exclusive of South Australia.

(b) Including scallops in Tasmania valued at £4,530 in 1931; £5,495 in 1932; £6,000 in 1933; £5,500 in 1934; £6,650 in 1935.

(iii) *Pearls, Pearl-shell and Bêche-de-mer.* Details regarding the production, trade, etc., for these items, so far as they are ascertainable, are given hereunder. As regards pearls, for obvious reasons no correct estimate can be obtained of the value of those found. Pearl-shell (*Margaritifera*) is widely distributed in North Australian waters over an area facing some thousands of miles of coastline, though not intensively over the whole distance. The north-west beds are the most prolific, but those around and to the north of Cape York are also of importance. There is need for further investigation into the occurrence of this valuable shell, as well as of trochus, green snail, window-pane shell (*Placuna*), the various types of trepang or bêche-de-mer (*Holothuria*), both in tropical Australian waters and those of Papua and the mandated area of New Guinea. Particulars as returned for the year 1935-36 are as follows :—

PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES, (a) 1935-36.

State or Territory.	Number of Boats Engaged.	Value of Boats and Equip-ment.	Number of Men Em-ployed.	Quantity of Pearl-shell obtained.	Gross Value of Pearl-shell obtained.	Gross Value* of Pearls obtained. (b)	Gross Value of Bêche-de-mer obtained.	Gross Value of Tortoise-shell obtained.
	No.	£	No.	Tons.	£	£	£	£
Queensland (c) ..	98	83,700	1,203	1,111	123,409	2,515	13,705	130
Western Australia(d)	87	46,795	529	434	45,543	2,816	532	142
Northern Territory	30	23,000	259	730	71,000	700	845	18
Australia ..	215	153,495	1,991	2,275	239,952	6,031	15,082	290

(a) No pearl-shelling industry in New South Wales, Victoria, South Australia and Tasmania.

(b) Incomplete; as returned.

(c) Also trochus-shell to the value of £37,809 in Queensland.

(d) Six months ended December, 1935.

The figures for tortoise-shell and trochus-shell as returned are defective, as the necessary information is not collected in full detail. In the following summary of production during the last five years export figures of Australian origin are inserted for both of these items :—

PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES.—AUSTRALIA.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
No. of boats engaged	241	231	237	230	215
No. of men employed	2,109	2,064	2,339	2,599	1,991
Pearl-shell obtained—					
Quantity tons	1,310	1,419	1,675	2,107	2,275
Value £	219,887	214,747	202,755	201,243	239,952
Pearls obtained (a)—					
Value £	7,415	8,171	9,361	9,439	6,031
Bêche-de-mer obtained—					
Quantity tons	(b)	(b)	(b)	(b)	(b)
Value £	48,291	19,265	18,362	14,392	15,082
Tortoise-shell exported—					
Value £	1,112	210	696	747	402
Trochus-shell exported—					
Value £	32,532	49,525	41,596	44,694	41,590

(a) Incomplete; as returned.

(b) Not returned.

2. **Value of Production.**—As the outcome of a series of conferences by Australian Statisticians it is now possible to present the value of production of the fishing industry on a much more satisfactory basis than was possible hitherto. It should be remembered, however, that the actual collection of statistics of the quantity of fish taken presents many difficulties and therefore the gross values in some States are not, perhaps, as exact as might be desired. Particulars of the value of other materials used in the process of production are not available for all States, and consequently the values can only be stated at the point of production and not on a net basis as has been done with other industries. Variations in the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been attained.

GROSS AND LOCAL VALUE OF FISHERIES PRODUCTION, 1935-36.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.
	£	£	£
New South Wales	726,000	143,000	583,000
Victoria	197,009	50,063	146,946
Queensland	347,000	60,000	287,000
South Australia	216,675	32,006	184,669
Western Australia	185,970	6,565	179,405
Tasmania	71,040	..	71,040
<hr/>			
Total { 1935-36	(a) 1,743,694	291,634	1,452,060
{ 1934-35	(a) 1,595,127	252,111	1,343,016
{ 1933-34	(a) 1,578,328	248,603	1,329,725

(a) Not including production in the Northern Territory of a gross value of £73,109 in 1935-36; £41,526 in 1934-35; and £42,915 in 1933-34.

3. **Fish Preserving.**—To encourage the industry the Federal Parliament provided a bounty of $\frac{1}{4}$ d. per lb. for fish preserved as prescribed during the ten years 1907-8 to 1916-17. This failed to develop the industry, and was not renewed on its expiration in 1916-17. The amount of bounty paid during the ten years was only £3,005. Consideration of a further attempt to develop this branch of the fishing industry is now receiving the attention of the Commonwealth Government. Details of the proposals are shown in § 1 hereinbefore.

4. **State Revenue from Fisheries.**—The revenue from fisheries in each State during the year 1935-36 is given hereunder:—

FISHERIES.—REVENUE, 1935-36.

State or Territory.	Licences.	Leases.	Fines and Forfeitures.	Other Sources.	Total.
	£	£	£	£	£
New South Wales(a)	1,411	10,401	538	678	13,028
Victoria (c)	1,090	19	447	118	1,674
Queensland	2,986	1,660	176	3	4,825
South Australia(a)	1,475	..	..	..	1,475
Western Australia(b)	392	436	63	10	901
Tasmania(a)	790	..	..	151	941
Northern Territory	301	1	..	..	302
<hr/>					
Total	8,445	12,517	1,224	960	23,146

(a) Year ended December, 1935.
£3,195 received from sporting licences.

(b) Six months ended December, 1935.

(c) Excluding

Similar particulars for Australia for the last five years are given in the following table:—

FISHERIES.—REVENUE, AUSTRALIA.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Licences	10,334	9,428	9,545	8,976	8,445
Leases	12,842	12,508	12,319	12,265	12,517
Fines and Forfeitures	648	960	957	903	1,224
Other Sources	537	558	851	842	960
Total	24,361	23,454	23,672	22,986	23,146

§ 3. Oversea Trade in Fishery Products.

1. Imports of Fish.—The development of the local fishing industry leaves much to be desired, as is evident from the large imports. For the last five years the imports were as follows:—

FISH.—IMPORTS, AUSTRALIA.

Australian Currency Value.

Classification.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Fresh (oysters) ..	cwt. 956	3,367	4,609	4,982	2,349
	£ 519	1,643	2,702	4,044	1,500
Fresh, or preserved by cold process	cwt. 35,843	57,346	70,585	85,777	75,839
	£ 96,410	142,389	204,746	257,870	272,501
Potted ..	cwt. 3,380	4,900	5,794	7,426	8,419
	£ 62,616	82,288	96,451	109,943	118,271
Preserved in tins ..	cwt. 141,326	174,982	209,640	246,525	262,373
	£ 586,516	693,238	817,398	926,344	987,280
Smoked, dried, and n.e.i.	cwt. 6,022	8,405	13,340	11,102	15,065
	£ 20,066	24,602	25,744	29,932	40,885
Crustaceans ..	cwt. (a)	(a)	4,393	4,008	4,292
	£ (a)	(a)	42,561	38,864	39,277
Total ..	cwt. 188,427	249,060	308,361	359,820	368,337
	£ 766,127	914,160	1,189,602	1,369,997	1,459,720

(a) Not recorded separately.

Tinned fish constitutes by far the largest proportion of the imports; salmon from Canada, herrings from the United Kingdom and sardines from Norway were the chief varieties imported. The potted fish comes chiefly from the United Kingdom, which also supplied a considerable proportion of the fresh fish imported in 1935-36; the bulk of the remainder came from New Zealand and the Union of South Africa. The small import of oysters is supplied by New Zealand, while Japan furnished 3,135 cwt. of the crustaceans imported.

2. Exports of Fish.—The exports of fish are comparatively insignificant. During the year 1936-37 they were as follows:—Fresh or preserved by cold process, 57,958 lb., £1,859; oysters, fresh, 6 cwt., £12; potted or concentrated, £105; preserved in tins, 450,062 lb., £14,576; smoked or dried, 24,474 lb., £710; other including salted, 800 cwt., £7,030.

3. Exports of Pearl and Other Shell.—The exports of pearl, tortoise and trochus-shell of Australian origin are given hereunder, for the five years 1932-33 to 1936-37 :—

PEARL, TORTOISE AND TROCHUS-SHELL.—EXPORTS, AUSTRALIA.

Article.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Pearl-shell ..	cwt.	32,975	33,721	43,467	56,306	52,058
	£	233,786	198,347	218,463	302,491	319,631
Tortoise-shell ..	lb.	519	1,292	2,229	663	674
	£	210	606	742	402	367
Trochus-shell ..	cwt.	13,421	9,128	10,111	9,260	8,847
	£	49,525	41,550	44,694	41,590	51,209

The bulk of the pearl-shell exported during 1935-36 was consigned to the United States of America and the United Kingdom, the respective values of the shipments amounting to £98,080 and £197,449, while trochus-shell to the value of £41,348 was dispatched to Japan.

§ 4. The Development of Fisheries in Australia.

In 1907 the Commonwealth Government decided to demonstrate what might be attained commercially by the application of modern methods in fishery. A Federal Investigation Ship, the *Endeavour*, was constructed specially for the work, and a Director of Fisheries was appointed. Experimental cruises were undertaken, which showed that Australia possesses an asset of considerable value in her sea fisheries. The *Endeavour* was unfortunately lost at sea with all on board at the end of 1914. A description of the trawling grounds discovered, data regarding oceanography to the east of Australia, and a list of the publications of the Department will be found on pp. 333 to 335 of the Official Year Book No. 14.

In accordance with the recommendations of the Australian Fisheries Conference of 1927-29 the Commonwealth Government has decided to continue investigations, and the Council for Scientific and Industrial Research has been entrusted with the carrying out of the fisheries programme. This has been referred to in § 1 par. 2 above.

§ 5. Trawling in Australian Waters.

The State Trawling Industry was established in New South Wales in 1915, and fishing operations were conducted with seven steel steam trawlers. The catches were landed at Sydney and Newcastle, and the fish distributed through retail shops, of which there were fourteen in the metropolitan area, one in Newcastle, and five in country towns. Early in the year 1923 the Government discontinued trawling operations, as the venture was not a commercial success. The operations of the trawlers, however, revealed some of the richest trawling areas in the world, and these localities are being successfully exploited by private enterprise.

CHAPTER XXIV.

MANUFACTURING INDUSTRY.

NOTE.—In all tables relating to employees—except where specially mentioned—“Number of Employees” includes working proprietors.

§ 1. Number and Classification of Factories.

1. Number of Factories in each State.—The following table gives the number of factories in each State for the years specified :—

FACTORIES.—NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1931-32 ..	7,397	8,204	2,013	1,662	1,490	891	21,657
1932-33 ..	7,444	8,612	2,155	1,710	1,499	910	22,330
1933-34 ..	7,818	8,896	2,345	1,733	1,606	899	23,297
1934-35 ..	8,254	9,100	2,470	1,803	1,658	926	24,211
1935-36 ..	8,486	9,160	2,482	1,895	1,946	925	24,894

2. Classification of Factories, Australia.—The next table shows the number of factories in Australia for the years specified, classified in the industrial groups agreed upon by the Conference of Statisticians in 1930. This classification which was introduced during the year 1930-31 superseded the grouping which had been in use since 1902. The definition of a factory adopted at the Conference of Statisticians in 1902 is, however, still used, viz., “Any factory, workshop or mill where four or more persons are employed or power is used.” Details in regard to some of the principal industries included in the table will be found in § 9 hereinafter.

FACTORIES.—CLASSIFICATION, AUSTRALIA.

Class of Industry.	1931-32.	1932-33	1933-34.	1934-35.	1935-36.
I. Treatment of Non-metalliferous Mine and Quarry Products	349	374	404	433	462
II. Bricks, Pottery, Glass, &c.	313	362	409	431	480
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	544	547	589	596	630
IV. Industrial Metals, Machines, Implements and Conveyances	5,376	5,529	5,780	6,106	6,303
V. Precious Metals, Jewellery and Plate	240	242	255	276	277
VI. Textiles and Textile Goods	515	555	588	588	580
VII. Skins and Leather	485	487	511	512	525
VIII. Clothing	3,822	3,917	4,052	4,226	4,260
IX. Food, Drink and Tobacco	4,344	4,421	4,583	4,687	4,721
X. Woodworking and Basketware	2,077	2,108	2,243	2,416	2,541
XI. Furniture, Bedding, &c.	910	947	995	1,028	1,038
XII. Paper, Stationery, Printing, Bookbinding, &c.	1,511	1,624	1,712	1,750	1,781
XIII. Rubber	279	304	305	292	290
XIV. Musical Instruments	41	35	32	26	31
XV. Miscellaneous Products	283	312	331	310	371
XVI. Heat, Light and Power	466	476	497	503	510
Total	21,657	22,330	23,297	24,211	24,894

The number of factories in operation declined each year from 1928-29 to 1931-32 as the result of the economic depression, but the returns since the last-mentioned year reveal a substantial recovery in every State, the number recorded for Australia in 1935-36 being the highest to date.

3. Classification of Factories, States, 1935-36.—The following table shows the number of factories in each State in 1935-36, classified according to the nature of the industry :—

FACTORIES.—CLASSIFICATION, 1935-36.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	160	161	44	40	42	15	462
II. Bricks, Pottery, Glass, &c. ..	207	109	38	43	41	12	450
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	248	243	39	47	33	20	630
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,298	2,421	502	443	558	171	6,393
V. Precious Metals, Jewellery and Plate ..	74	141	22	18	16	6	277
VI. Textiles and Textile Goods ..	151	356	21	32	17	12	589
VII. Skins and Leather ..	208	205	52	27	24	9	525
VIII. Clothing ..	1,511	1,922	250	289	233	55	4,260
IX. Food, Drink and Tobacco ..	1,403	1,127	585	522	105	205	4,721
X. Woodworking and Basketware ..	834	684	409	155	196	263	2,541
XI. Furniture, Bedding, &c. ..	320	397	119	74	100	47	1,057
XII. Paper, Stationery, Printing, Book-binding, &c. ..	660	672	170	113	137	29	1,781
XIII. Rubber ..	98	107	23	27	25	10	290
XIV. Musical Instruments ..	10	13	3	2	3	..	31
XV. Miscellaneous Products ..	136	158	37	13	23	4	371
XVI. Heat, Light and Power ..	168	134	65	49	93	7	516
Total	8,486	9,160	2,482	1,895	1,946	925	24,894

§ 2. Classification of Factories according to Number of Employees.

1. States, 1935-36.—The following table shows, for each State, the number of factories classified according to the number of hands employed in 1935-36 :—

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1935-36.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,745	3,312	770	464	936	270	8,497
4 ..	716	826	242	208	113	104	2,209
5 to 10 ..	2,200	2,194	691	610	476	351	6,522
11 to 20 ..	1,120	1,136	340	276	208	105	3,185
21 to 50 ..	998	997	245	222	139	59	2,660
51 to 100 ..	374	369	100	68	52	23	986
Over 100 ..	333	326	94	47	22	13	835
Total	8,486	9,160	2,482	1,895	1,946	925	24,894

Some marked changes have taken place in the distribution of factories according to the number of employees during the past decade. In 1925-26 of a total of 21,242 factories reported, 7,317 or 34.50 per cent. employed less than five persons whereas in 1935-36 the number of such factories had increased to 10,700 representing 43.0 per cent. of a total of 24,894 factories. The increase in the number of small factories was probably due to the multiplication of small repair establishments (boots and shoes, cycles and motors, etc.) which are technically accounted as factories by the installation of some power machine.

In the other groups, the effect of the economic depression during the middle years of the decade is clearly noticeable, but since 1931-32 the improvement has been very steady. Factories employing over 100 hands advanced from 724 in 1925-26 to a new high level of 835 in 1935-36, the hands employed in these factories increasing from 195,543 or 43.37 per cent. of the total number to 230,889 or 46.0 per cent. during the same period.

The relative importance of large and small factories is more conclusively illustrated by a classification of hands employed according to the size of factory in which they work :—

FACTORIES.—CLASSIFICATION OF EMPLOYEES, ACCORDING TO SIZE OF FACTORY, 1935-36.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4 ..	5,450	6,248	1,649	996	1,779	567	16,689
4 ..	2,864	3,304	968	832	452	416	8,836
5 to 10 ..	15,284	15,314	4,715	4,190	3,081	2,391	44,975
11 to 20 ..	16,503	16,820	5,033	4,050	2,999	1,538	46,943
21 to 50 ..	31,713	31,673	7,674	7,197	4,449	1,886	84,592
51 to 100 ..	26,591	25,297	7,267	4,682	3,701	1,473	69,011
Over 100 ..	98,729	86,410	18,535	17,512	5,204	4,499	230,889
Total ..	197,134	185,066	45,841	39,459	21,665	12,770	501,935
Av. per F'cty	23.23	20.20	18.47	20.82	11.13	13.81	20.16

2. Australia, 1931-32 to 1935-36.—The percentage of employees in factories with more than 100 hands on the total for all factories reached its highest level in 1935-36 with 46.0 per cent., which was slightly in excess of the previous maximum of 44.4 per cent. in the previous year.

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, AUSTRALIA.

Establishments Employing on the Average—

Year.	20 hands and under.		21 to 100 hands.		101 hands and upwards.		Total.	
	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.
1931-32—								
Number ..	18,507	98,685	2,603	105,641	547	145,886	21,657	359,212
Average per establishment ..	..	5.33	..	40.58	..	266.70	..	16.17
Percentage on total ..	85.45	28.18	12.02	30.16	2.53	41.66	100.00	100.00
1932-33—								
Number ..	18,883	102,477	2,841	117,021	606	163,462	22,330	382,960
Average per establishment ..	..	5.43	..	41.19	..	269.74	..	17.15
Percentage on total ..	84.57	26.76	12.72	30.56	2.71	42.68	100.00	100.00
1933-34—								
Number ..	19,576	108,125	3,052	127,068	669	181,634	23,297	416,827
Average per establishment ..	..	5.52	..	41.63	..	271.50	..	17.89
Percentage on total ..	84.03	25.94	13.10	30.48	2.87	43.58	100.00	100.00
1934-35—								
Number ..	20,012	112,708	3,457	143,157	742	204,502	24,211	460,367
Average per establishment ..	..	5.63	..	41.41	..	275.61	..	17.91
Percentage on total ..	82.66	24.48	14.28	31.19	3.06	44.42	100.00	100.00
1935-36—								
Number ..	20,413	117,445	3,646	153,003	835	216,283	25,894	476,773
Average per establishment ..	..	5.75	..	42.13	..	276.51	..	20.1
Percentage on total ..	82.00	23.40	14.65	30.60	3.35	46.00	100.00	100.00

§ 3. Power used in Factories.

1. States, 1935-36.—The following table shows the number of factories using steam, gas, oil, electricity, or water power, and the average horse-power used in 1935-36:—

FACTORIES.—AVERAGE HORSE-POWER USED, 1935-36.

State.	Number of Establishments.			Average Horse-power Used.					
	Using Power.	Others.	Total.	Steam.	Gas.	Oil.	Electricity.	Water.	Total.
	No.	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	8,061	425	8,486	576,079	7,805	49,932	365,621	18,096	1,017,533
Victoria ..	8,480	680	9,160	190,259	6,650	15,086	214,877	21,051	448,523
Queensland ..	2,301	181	2,482	119,546	12,084	19,325	40,051	1,388	192,394
S. Australia ..	1,711	184	1,895	135,878	4,753	12,613	54,126	..	207,394
W. Australia ..	1,780	166	1,946	59,603	3,730	20,116	31,505	138	115,182
Tasmania ..	864	61	925	5,187	28	1,669	70,336	88,167	165,887
Australia ..	23,197	1,697	24,894	1,086,642	35,050	119,341	777,016	128,840	2,146,889

Factories in Australia include electric light and power works. Most of the power in these works is, however, used in generating electric power and light, and the power so produced is counted again under the heading of electricity. The actual amount of duplication cannot be given for all States, but a fair measure of the amount of power used in factories (in the common sense) is given by deducting the total of Class XVI., Heat, Light and Power, from the gross total for all factories. This is done in the last column of the table below. It must not be inferred, however, that the whole of the deduction is a duplication, as portion of it represents the production of light for general purposes, while an appreciable amount of power is used on farms and in private houses.

2. Australia, 1931-32 to 1935-36.—The following table shows the average horse-power used in factories in Australia in each of the last five years:—

FACTORIES.—AVERAGE HORSE-POWER USED, AUSTRALIA.

Year.	Number of Establishments.			Average Horse-power Used.					
	Using Power.	Others.	Total.	Steam.	Gas.	Oil.	Electricity.	Water.	Total (a).
	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
1931-32 ..	20,135	1,522	976,880	41,706	102,106	590,812	149,375	1,851,879	809,703
1932-33 ..	20,826	1,504	877,164	38,070	102,236	608,883	126,465	1,753,718	821,021
1933-34 ..	21,606	1,001	981,702	38,807	100,825	681,553	111,138	1,917,115	884,094
1934-35 ..	22,588	1,623	981,401	36,282	110,084	730,573	134,012	1,995,312	941,600
1935-36 ..	23,197	1,697	1,086,642	35,050	119,341	777,016	128,840	2,146,889	999,595

(a) See preceding paragraph.

The last column of the above table, which may be called roughly the net power used in factories, shows an average increase of about 47,000 horse-power per annum or nearly 6 per cent. per annum during the last four years. The net horse-power per employee increased from 1.4 in 1924-25 to 1.6 in 1928-29 and continued to increase in each succeeding year until it reached 2.4 in 1931-32. Much of the increase in the latter years was due to a more rapid decline in employees than mechanical power during the economic depression, and the figure has since fallen to 2.0 with the recovery in the number of employees.

3. **Classes of Industry.**—The next table shows the average horse-power used in factories, by classes, in each State during the year 1935-36:—

FACTORIES.—AVERAGE HORSE-POWER USED IN EACH CLASS, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	31,166	17,204	2,883	3,031	2,854	7,658	64,796
II. Bricks, Pottery, Glass, &c. ..	18,843	14,560	1,887	3,971	2,319	509	41,089
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	14,452	14,585	1,890	5,389	3,412	358	40,086
IV. Industrial Metals, Machines, Implements and Conveyances ..	184,298	53,279	12,649	17,728	8,680	53,163	329,797
V. Precious Metals, Jewellery and Plate ..	860	1,688	101	100	46	20	2,905
VI. Textiles and Textile Goods ..	15,397	28,676	2,159	2,864	929	2,760	52,785
VII. Skins and Leather ..	6,807	6,574	1,870	176	303	154	15,884
VIII. Clothing ..	6,764	9,236	1,059	793	581	91	18,524
IX. Food, Drink and Tobacco ..	79,144	59,725	69,202	16,691	12,876	5,890	243,528
X. Woodworking and Basketware ..	29,470	21,101	19,114	6,906	6,676	5,870	89,137
XI. Furniture, Bedding, &c. ..	6,861	5,411	1,900	2,199	960	582	17,913
XII. Paper, Stationery, Printing, Bookbinding, &c. ..	15,970	17,977	3,569	1,920	2,043	554	42,063
XIII. Rubber ..	18,015	17,092	783	123	68	81	36,162
XIV. Musical Instruments ..	506	54	8	8	3	..	579
XV. Miscellaneous Products ..	2,021	1,636	126	271	157	136	4,347
Total less Class XVI. ..	430,574	268,798	119,230	61,260	41,007	77,826	999,595
XVI. Heat, Light and Power ..	586,959	179,725	73,164	146,110	73,275	88,061	1,147,294
Grand Total. . .	1,017,533	448,523	192,394	207,370	115,182	165,887	2,146,889

§ 4. Employment in Factories.

1. **Total Number Employed.**—Each person employed in and about a factory excepting carters engaged entirely in the delivery of manufactured goods is counted as a factory employee, and the figures relating to employment include, therefore, proprietors who work in their own business as well as "outworkers" (see paragraph 5 (ii) hereinafter). Employment has been classified as follows:—(i) Working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) skilled and unskilled workers in the factories, mills, or workshops; (vi) carters and messengers; and (vii) others.

Prior to the year 1928-29 employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures, therefore, represented the average number employed over the period worked, which,

for many factories, was less than a full year. Commencing with the year 1928-29 the figure represents the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of employees (*see* § 2 *ante*), however, is still based on the old method, but for all other purposes the average number employed over the full year is used.

The following table shows, for each year from 1931-32 to 1935-36 inclusive, (a) the average number of persons (including both sexes of all ages) employed in manufacturing industries in each State; (b) the percentage of the number employed in each State on the total number employed in Australia; and (c) the number employed per ten thousand of the mean population in each State and Australia.

The number of persons employed in factories in Australia reached its highest point before the depression during the years 1926-27 to 1928-29 when the average for those years was slightly in excess of 450,000. The downward trend in manufacturing operations which began early in 1930 continued with increasing force until the number employed had fallen to 336,658 in 1931-32, a decline of 25 per cent. on the average already quoted. In 1932-33 there was a pronounced upward tendency, and thereafter each succeeding year recorded further improvement with the number eventually rising in 1935-36 to a new high level of 492,771. Stated in relation to population, however, the number employed in 1935-36 was still 5,300 less than in 1926-27.

FACTORIES.—EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).							
1931-32 ..	126,368	128,265	35,799	23,834	13,392	9,000	336,658
1932-33 ..	138,515	144,428	37,388	26,348	14,815	9,233	370,727
1933-34 ..	154,061	156,334	40,083	29,486	16,163	9,782	405,909
1934-35 ..	175,033	169,691	43,048	33,497	17,774	10,555	449,598
1935-36 ..	193,200	183,300	45,128	35,471	20,003	11,589	492,771

PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1931-32 ..	37.54	38.10	10.63	7.08	3.98	2.67	100.00
1932-33 ..	37.36	38.96	10.09	7.10	4.00	2.49	100.00
1933-34 ..	37.96	38.52	9.87	7.26	3.98	2.41	100.00
1934-35 ..	38.93	37.74	9.58	7.45	3.95	2.35	100.00
1935-36 ..	39.21	37.21	9.16	7.81	4.26	2.35	100.00

PER 10,000 OF POPULATION.

1931-32 ..	492	711	385	413	309	398	514
1932-33 ..	535	706	397	455	339	405	561
1933-34 ..	590	857	422	506	367	427	610
1934-35 ..	664	924	448	573	401	461	671
1935-36 ..	727	995	464	656	469	503	730

2. Rates of Increase, 1931-32 to 1935-36.—The percentage of increase or decrease on the average number of persons employed in the preceding year is shown below for each State for each of the years specified:—

FACTORY EMPLOYEES.—ANNUAL INCREASE.—PER CENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	%	%	%	%	%	%	%
1931-32 ..	— 0.96	1.78	— 5.55	— 0.22	— 8.40	1.94	— 0.64
1932-33 ..	9.61	12.60	4.44	10.55	10.63	2.59	10.12
1933-34 ..	11.22	8.24	3.45	11.91	9.10	5.95	9.49
1934-35 ..	11.98	7.87	6.89	11.97	9.06	7.32	9.72
1935-36 ..	10.38	8.07	4.83	14.85	18.11	9.80	9.60

NOTE.—The minus sign (—) denotes decrease.

3. Employees in Classes of Industry, Australia, 1931-32 to 1935-36.—The table hereunder gives the average number of persons employed in factories under each industrial group in Australia in the years 1931-32 to 1935-36 inclusive:—

FACTORY EMPLOYEES.—CLASSES, AUSTRALIA.

Class of Industry.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,885	4,534	5,507	6,550	7,571
II. Bricks, Pottery, Glass, &c. ..	5,200	6,816	9,020	11,483	13,088
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	12,058	12,655	13,310	14,846	16,217
IV. Industrial Metals, Machines, Imple- ments and Conveyances ..	82,688	94,598	107,398	125,640	145,481
V. Precious Metals, Jewellery and Plate ..	1,670	2,029	2,371	2,737	3,210
VI. Textiles and Textile Goods ..	30,553	34,974	36,790	38,042	42,031
VII. Skins and Leather ..	7,846	8,865	9,513	9,779	10,440
VIII. Clothing ..	61,864	67,311	72,260	78,074	81,400
IX. Food, Drink and Tobacco ..	62,455	64,670	67,668	70,517	73,205
X. Woodworking and Basketware ..	14,319	17,044	19,927	24,192	27,478
XI. Furniture, Bedding, &c. ..	7,249	8,108	9,562	11,306	13,443
XII. Paper, Stationery, Printing, Book- binding, &c. ..	29,052	29,955	31,937	34,018	35,052
XIII. Rubber ..	5,051	5,822	6,561	7,369	6,797
XIV. Musical Instruments ..	800	749	572	460	451
XV. Miscellaneous Products ..	3,827	4,488	5,122	5,786	6,591
XVI. Heat, Light and Power ..	8,141	8,109	8,391	8,799	9,356
Total ..	336,658	370,727	405,909	449,598	492,771

An examination of the returns of employment in the various classes reveals only one major class which has consistently augmented its numbers since 1928-29. Apart from a decline in 1930-31 Class VI. Textiles progressed in numbers each year rising from 28,117 employees in 1928-29 to 42,031 in 1935-36, or by nearly 50 per cent. during the period. All the other important classes lost heavily during the course of the depression, and the gains of recent years in most cases represent in effect only the re-engagement of those temporarily displaced. In the largest Class.—Industrial Metals, Machines, etc., however, employment reached a new high level in 1935-36, the number recorded being nearly 14,000 in excess of the previous peak in 1926-27.

4. Employees in Classes of Industry, States, 1935-36.—The following table gives a classification of employees in manufacturing industries in each State in 1935-36 :—

FACTORY EMPLOYÉES.—CLASSES, 1935-36.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,303	2,217	632	534	592	293	7,571
II. Bricks, Pottery, Glass, &c. ..	6,623	4,008	678	841	759	179	13,688
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	6,615	6,870	557	1,370	689	116	16,217
IV. Industrial Metals, Machines, Implements and Conveyances ..	66,277	43,573	10,366	16,583	6,023	2,659	143,481
V. Precious Metals, Jewellery and Plate ..	845	1,994	117	165	68	21	3,210
VI. Textiles and Textile Goods ..	13,045	24,158	888	1,230	510	1,630	42,031
VII. Skins and Leather ..	4,079	4,689	800	437	302	43	10,440
VIII. Clothing ..	28,577	38,807	6,070	4,341	2,919	596	81,400
IX. Food, Drink and Tobacco ..	24,489	24,126	12,604	5,680	3,323	2,743	73,265
X. Woodworking and Basketware ..	8,738	7,313	5,431	1,738	2,440	1,809	27,478
XI. Furniture, Bedding, &c. ..	5,582	4,330	1,485	983	763	300	13,443
XII. Paper, Stationery, Printing, Bookbinding, &c. ..	14,969	12,979	3,449	2,165	1,644	746	35,952
XIII. Rubber ..	2,634	3,327	574	146	64	52	6,797
XIV. Musical Instruments ..	283	97	35	8	28	..	431
XV. Miscellaneous Products ..	3,249	2,307	309	298	223	205	6,501
XVI. Heat, Light and Power ..	3,292	2,205	1,073	1,952	637	197	9,356
Total	193,200	183,390	45,128	38,471	20,993	11,589	492,771

5. Employees According to Nature of Employment.—(i) *General*. In the following table the average numbers of persons employed in the States in 1935-36 are classified according to the nature of their employment :—

FACTORY EMPLOYEES.—NATURE OF EMPLOYMENT, 1935-36.

State.	Average Number of Persons Employed.						Total.
	Working Pro- priators.	Managers and Overseers.	Account- ants and Clerks.	Engine- drivers and Firemen.	Workers, Skilled & Unskilled, (a)	Carters, Messen- gers and Others.	
New South Wales ..	6,732	6,751	11,739	2,424	162,723	2,831	193,200
Victoria	8,040	6,025	8,483	1,808	156,636	2,398	183,390
Queensland ..	2,001	1,883	3,124	1,765	34,987	1,368	45,128
South Australia ..	1,451	1,356	2,650	405	31,977	632	38,471
Western Australia	1,195	883	1,163	470	16,753	529	20,993
Tasmania ..	578	518	778	226	9,169	320	11,589
Australia ..	19,997	17,416	27,937	7,098	412,245	8,078	492,771

(a) Including Outworkers.

(ii) *Outworkers*. The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be done in the employees' own homes. Individuals working for themselves are not included. The following table gives

particulars of the average number of outworkers connected with factories in each State in each of the last five years :—

FACTORIES.—OUTWORKERS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1931-32	108	140	27	12	3	2	292
1932-33	131	178	25	18	3	7	362
1933-34	261	164	37	11	2	15	490
1934-35	296	143	11	12	3	10	475
1935-36	235	142	10	6	..	29	422

(a) In all tables relating to number of hands employed in factories, outworkers are included.

The Factories Acts in each State contain provisions regulating the employment of outworkers. Records of outwork, specifying the names and remuneration of workers, and stating the places where the work is done, must be kept by factory proprietors. Fuller information regarding the operation of the Factories Acts will be found in Official Year Book No. 16, pp. 540 to 566.

§ 5. Sex Distribution in Factories.

1. Employment of Females.—In all the States the employment of female labour in factories is regulated by Acts of Parliament. More extended reference to this matter will be found in Official Year Book No. 16, pp. 540 to 566.

2. Distribution of Employees according to Sex.—(i) *General.* In New South Wales the ratio of the number of females employed in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and is now more than one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and at present about one third of the factory employees are females. In the remaining States the ratio was roughly one female employed to every four males, while that for Australia was two to five. The employment of women is, however, mainly confined to a few trades.

(ii) *Average Number of Males and Females Employed.* 1931-32 to 1935-36. The next table shows the average number of male and female employees in factories in each State for the five years ended 1935-36 :—

FACTORIES.—MALES AND FEMALES EMPLOYED.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
MALES.					
New South Wales	90,682	99,721	111,653	127,114	140,896
Victoria	81,618	91,899	100,959	110,910	121,734
Queensland	29,149	30,099	32,248	34,596	36,411
South Australia	18,932	20,901	23,743	27,271	31,391
Western Australia	10,535	11,748	12,930	14,253	16,911
Tasmania	6,999	7,147	7,716	8,321	9,211
Australia	237,915	261,515	289,249	322,465	356,554
FEMALES.					
New South Wales	35,686	38,794	42,408	47,919	52,304
Victoria	46,647	52,529	55,375	58,781	61,056
Queensland	6,650	7,289	7,835	8,452	8,717
South Australia	4,902	5,447	5,743	6,226	7,080
Western Australia	2,857	3,067	3,233	3,521	4,082
Tasmania	2,001	2,086	2,066	2,234	2,378
Australia	98,743	109,212	116,660	127,133	136,217

3. Rate of Variation for each Sex.—The percentages of annual increase or decrease in the years indicated on the average number of males and females employed in factories are shown below :—

PERCENTAGES OF ANNUAL INCREASE, MALE AND FEMALE FACTORY EMPLOYEES.

State.	1930-31— 1931-32.	1931-32— 1932-33.	1932-33— 1933-34.	1933-34— 1934-35.	1934-35— 1935-36.
MALES.					
	%	%	%	%	%
New South Wales ..	— 3.42	9.97	11.97	13.85	10.84
Victoria ..	— 1.60	12.60	9.86	9.86	8.98
Queensland ..	— 6.41	3.26	7.14	7.28	5.25
South Australia ..	— 2.07	10.40	13.60	14.86	15.11
Western Australia ..	— 10.18	11.51	10.06	10.23	18.65
Tasmania ..	1.10	2.11	7.96	7.84	10.70
Total ..	— 3.26	9.92	10.61	11.48	10.57
FEMALES.					
	%	%	%	%	%
New South Wales ..	5.82	8.71	9.32	13.00	9.15
Victoria ..	8.31	12.61	5.42	6.15	4.90
Queensland ..	— 1.58	9.61	7.49	7.87	3.14
South Australia ..	7.64	11.12	5.43	8.41	13.72
Western Australia ..	— 1.18	7.35	5.41	8.90	15.93
Tasmania ..	4.93	4.25	— 0.96	8.13	6.45
Total ..	6.29	10.60	6.82	8.98	7.15

NOTE.—The minus sign (—) indicates decrease.

4. Masculinity of Employees in Factories.—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of employees for each State for a series of years. The following table furnishes particulars for the years 1931-32 to 1935-36 :—

MASCULINITY(a) OF FACTORY EMPLOYEES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
1931-32 ..	254	175	438	386	369	350	241
1932-33 ..	264	175	413	384	383	343	239
1933-34 ..	263	182	412	413	400	373	248
1934-35 ..	275	189	409	438	405	372	254
1935-36 ..	269	197	418	443	414	387	262

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 100 females employed in factories for every 300 males, but in that year the proportion of females began to rise with increasing activity in the clothing and textile industries in which the number of females to males is relatively high. As these trades were not as seriously affected by the depression as the heavier industries, comprised largely of male labour, the proportion continued to rise until in 1932-33 there were only 239 males employed to every 100 females. Since that year the proportion has declined to 202 males in 1935-36, and according to the "Index of Factory Employment" published in Part C.—Employment, § 2 par. 4 of Chapter XVII. the figure declined still further in 1936-37 to about 274 males to every 100 females.

5. Employment of Females in Particular Industries.—The greater number of females engaged in manufacturing industries is employed in four classes, viz. :—VI., Textiles; VIII., Clothing; IX., Food and Drink; and XII., Paper, Stationery, etc. In 1935-36 these industries accounted for 83.77 per cent. of all females employed in factories. In two classes only did the number of females exceed the number of males, viz., in Class VI.,

Textiles, where there were 147 females to every 100 males and in Class VIII., Clothing, with 281 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1935-36:—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1935-36.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER EMPLOYED—MALES.							
VI. Textiles and Textile Goods ..	5,274	9,718	375	794	260	621	17,042
VIII. Clothing ..	7,542	10,556	1,405	983	681	217	21,384
IX. Food and Drink ..	16,267	17,861	11,205	4,652	2,658	2,008	54,741
XII. Paper, Stationery, &c. ..	10,279	9,146	2,549	1,540	1,271	589	25,374
All Other Classes ..	101,534	74,453	20,877	23,422	12,041	5,686	238,013
Total ..	140,896	121,734	36,411	31,391	16,911	9,211	356,554

AVERAGE NUMBER EMPLOYED—FEMALES.							
VI. Textiles and Textile Goods ..	8,371	14,440	483	436	250	1,009	24,989
VIII. Clothing ..	21,035	28,341	4,665	3,358	2,238	379	60,016
IX. Food and Drink ..	8,222	6,565	1,399	1,028	665	645	18,524
XII. Paper, Stationery, &c. ..	4,690	3,833	900	625	373	157	10,578
All Other Classes ..	9,986	8,477	1,270	1,633	556	188	22,110
Total ..	52,304	61,656	8,717	7,080	4,082	2,378	136,217

The classification of the employment of females in the several industries in Class VIII., Clothing, which is the most important group, and the relation of their number to that of the males so employed, are shown in the following table:—

FEMALES EMPLOYED IN EACH INDUSTRY IN CLASS VIII., 1935-36.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)
Tailoring and Slop Clothing ..	1,961	8,629	440	1,980	6,561	331	1,268	4,478	353
Waterproof and Oil- skin Clothing ..	8	9	113	72	216	300	6	11	183
Dressmaking ..	39	1,356	3,477	589	7,735	1,313	62	2,055	3,315
Millinery ..	136	1,334	967	126	1,404	1,114	41	804	1,961
Shirts, Collars and Underclothing ..	334	3,913	1,172	441	4,449	1,009	171	1,906	1,115
Stays and Corsets ..	56	602	1,075	144	813	565	7	61	871
Handkerchiefs, Ties and Scarves ..	118	867	735	46	524	1,139	5	9	180
Hats and Caps ..	634	1,157	182	710	912	128	44	81	184
Gloves ..	14	38	271	39	114	292	..	..	..
Boots and Shoes ..	2,556	2,581	101	4,735	4,612	90	1,090	868	80
Boot Repairing (In- cluding Bespoke Work) ..	998	30	3	710	11	2	388	26	7
Boot Accessories ..	137	33	24	482	196	41	..	..	..
Umbrellas and Walk- ing Sticks ..	40	75	188	28	37	132	12	17	142
Dyeworks and Clean- ing (including Re- novating and Repairing) ..	459	281	61	391	419	107	189	321	170
Other ..	50	130	260	63	338	537	3	3	100
Total ..	7,542	21,035	279	10,556	28,341	268	3,286	10,640	324

(a) Number of females per 100 males.

§ 6. Child Labour in Factories.

1. Conditions of Child Labour.—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. Reference to the legislation regarding the employment of child labour

in factories will be found in Official Year Book No. 16, pp. 540 to 566. The object of the restrictions imposed is to assure amongst other things that a proper period shall be devoted to primary education, and that the early years of toil shall not exhaust the worker before the attainment of full growth.

2. Average Number of Children Employed, 1931-32 to 1935-36.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The following table shows the average number of children of each sex employed in manufacturing industries in the years 1931-32 to 1935-36:—

CHILDREN EMPLOYED IN FACTORIES.

State:	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
MALES.					
New South Wales ..	1,924	2,366	3,040	3,990	4,887
Victoria	2,615	3,441	4,248	5,194	6,118
Queensland	920	903	1,135	1,146	1,543
South Australia ..	509	611	799	1,025	1,352
Western Australia ..	344	351	427	574	777
Tasmania	185	263	219	255	330
Australia	6,497	7,935	9,868	12,184	15,007
FEMALES.					
New South Wales ..	3,263	3,561	4,422	5,571	6,485
Victoria	4,089	4,643	5,634	6,015	6,002
Queensland	631	849	981	1,048	1,281
South Australia ..	453	523	644	738	870
Western Australia ..	161	202	235	426	473
Tasmania	169	209	202	294	310
Australia	8,766	9,987	12,118	14,092	15,427
TOTAL.					
New South Wales ..	5,187	5,927	7,462	9,561	11,372
Victoria	6,704	8,084	9,882	11,209	12,120
Queensland	1,551	1,752	2,116	2,194	2,824
South Australia ..	962	1,134	1,443	1,763	2,228
Western Australia ..	505	553	662	1,000	1,250
Tasmania	354	472	421	549	640
Australia	15,263	17,922	21,986	26,276	30,434

3. Percentage of Children on Total Number of Employees.—Juvenile employment in factories reached its maximum in 1935-36 when the numbers were: Males 15,007 and females 15,427, compared with 12,582 males employed in 1926-27 and 14,092 females in 1934-35, the previous highest points. The increases were general in most of the industries employing child labour, the most notable advance being made by male employees in Class IV.—Industrial Metals, etc.

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF FACTORY EMPLOYEES.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	%	%	%	%	%
New South Wales ..	4.10	4.28	4.84	5.46	5.89
Victoria	5.23	5.60	6.32	6.61	6.61
Queensland	4.33	4.69	5.28	5.10	6.26
South Australia ..	4.04	4.30	4.89	5.26	5.79
Western Australia ..	3.77	3.73	4.10	5.63	5.95
Tasmania	3.93	5.11	4.30	5.20	5.52
Australia	4.53	4.83	5.42	5.84	6.18

4. Industries Employing Child Labour.—The employment of children is practically confined to a limited number of industries, the most important of which are specified in the next table, which shows the average number employed in 1935-36 :—

CHILDREN EMPLOYED.—VARIOUS INDUSTRIES, 1935-36.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust.		Tas.		Australia.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Bricks and Tiles, Firebricks and Fireclay Goods	113	..	35	8	23	..	13	..	14	..	3	..	201	3
..	Glass Bottles	27	..	33	10	1	..	5	1	..	..	..	..	66	11
III.	Chemicals, Drugs and Medicines	67	126	12	65	3	11	13	24	4	3	1	1	100	230
IV.	Smelting, Converting, Refining and Rolling of Iron and Steel ..	266	15	319	37	69	3	105	22	..	..	..	..	759	77
..	Engineering (not Marine or Electrical)	224	19	352	16	82	..	78	17	49	1	5	..	790	53
..	Electrical Installations, Cables and Apparatus ..	179	39	260	39	5	..	19	..	9	..	..	..	472	78
..	Motor Vehicles and Cycles (H) Repairs ..	103	6	179	7	41	4	84	4	50	1	30	1	547	23
..	Motor Bodies	32	..	105	1	23	..	166	10	18	..	..	..	344	11
..	Brass and Copper	77	8	126	8	17	..	13	3	13	..	6	..	252	19
..	Galvanized Ironworking and Tinsmithing	224	57	338	71	31	3	51	..	50	2	2	..	606	133
..	Wireless Apparatus ..	216	41	206	25	2	..	..	..	3	..	..	..	427	66
VI.	Cotton	34	145	54	144	8	..	..	..	..	..	..	..	96	289
..	Wool, Worsted and Shoddy	107	498	504	645	4	18	52	31	5	19	77	154	809	1365
..	Hosiery and Other Knitted Goods	73	454	192	858	4	16	1	11	3	11	..	16	273	1366
..	Rope and Cordage	29	32	115	25	4	..	19	..	..	..	..	..	167	57
VII.	Tanning, Currying and Leather Dressing ..	71	1	143	1	23	1	3	..	1	..	1	..	242	3
..	Bags, Trunks and Other Leather Goods	51	69	49	63	12	7	12	21	4	1	..	..	128	161
VIII.	Tailoring and Slop Clothing	104	1031	93	468	38	315	13	174	6	83	3	26	257	2097
..	Dressmaking	2	206	30	796	2	128	3	134	1	107	..	4	38	1375
..	Millinery	16	225	5	148	5	68	..	28	1	6	..	..	27	475
..	Shirts, Collars and Underclothing	14	713	28	381	7	196	4	119	1	66	..	1	54	1476
..	Stays and Corsets	1	66	20	75	..	5	..	..	..	..	..	..	21	146
..	Hats and Caps	40	128	47	70	..	1	..	2	..	11	..	..	87	212
..	Boots and Shoes	190	432	177	379	29	95	29	43	37	16	5	2	467	967
IX.	Bakeries (including Cakes and Pastry) ..	48	23	74	5	18	19	23	3	18	3	64	86	245	139
..	Biscuits	70	221	111	88	2	6	15	23	6	12	..	..	204	350
..	Sugar Confectionery (including Chocolates) ..	85	394	39	166	22	70	10	40	1	17	..	..	157	687
..	Condiments, Coffee and Spices	31	101	12	32	2	18	22	5	14	2	..	3	81	161
XI.	Billiard Tables, Cabinet and Furniture making and Upholstery	187	23	223	17	93	13	97	6	66	1	14	..	680	60
XII.	Papermaking, etc.	92	336	11	..	3	..	..	..	..	..	..	..	106	336
..	Envelopes, Stationery, Paper Boxes, Bags, etc. .. ..	..	..	75	326	7	37	10	43	3	15	..	..	95	421
..	Newspapers and Periodicals	89	12	40	3	70	3	..	..	13	2	4	1	216	21
..	General Printing and Bookbinding (not including Government)	213	185	260	136	49	55	51	32	40	10	17	6	630	424

5. Apprenticeship.—In all the States, Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

§ 7. Salaries and Wages Paid and Value of Production.

NOTE.—In all tables relating to Salaries and Wages paid in Factories the amounts given are exclusive of sums drawn by working proprietors.

1. General.—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1935-36 was £414,088,455, of which amount the sum of £238,974,797 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £13,276,295 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, viz., £162,437,363, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., "The value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production." The total amount of salaries and wages paid in factories in 1935-36 was £82,098,288. This figure which is exclusive of amounts drawn by working proprietors shows an increase of £9,273,739, or 12.7 per cent., as compared with the total for the previous year.

2. Salaries and Wages Paid.—(i) *Total Amount, 1935-36.* The total amount of salaries and wages paid in the year 1935-36 in various classes of factories in each State is shown in the following table:—

SALARIES AND WAGES PAID IN FACTORIES, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	724,025	423,111	133,215	99,648	103,675	58,721	1,542,395
II. Bricks, Pottery, Glass, etc. ..	1,191,324	719,683	121,585	145,335	134,125	28,476	2,340,528
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,225,454	1,223,004	97,774	234,035	142,498	19,690	2,942,455
IV. Industrial Metals, Machines, Implements and Conveyances ..	13,173,872	7,824,200	2,119,292	3,938,183	1,156,171	525,014	27,836,732
V. Precious Metals, Jewellery and Plate ..	135,174	285,218	17,579	20,907	11,100	2,842	472,919
VI. Textiles and Textile Goods ..	1,741,004	2,965,297	108,134	140,530	71,418	218,130	5,250,513
VII. Skins and Leather ..	970,113	728,492	133,810	81,378	36,274	1,800	1,950,767
VIII. Clothing ..	3,010,404	4,266,062	574,055	376,550	282,645	57,701	8,567,417
IX. Food, Drink and Tobacco ..	4,454,391	4,437,447	2,880,793	934,004	619,091	412,822	13,768,548
X. Woodworking and Basketware ..	1,467,094	1,274,173	801,053	272,528	465,787	262,127	4,033,372
XI. Furniture, Bedding, etc. ..	912,297	561,639	244,943	140,460	117,112	37,839	2,014,290
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,766,902	2,328,720	649,705	376,158	325,428	147,241	6,594,154
XIII. Rubber ..	533,593	578,085	78,910	10,078	7,039	5,042	1,219,317
XIV. Musical Instruments ..	43,091	17,121	7,945	503	6,032	..	74,692
XV. Miscellaneous Products ..	418,701	324,758	34,735	39,461	28,687	24,376	870,118
XVI. Heat, Light and Power ..	836,725	499,012	281,381	479,989	164,409	49,557	2,311,073
Total ..	33,314,534	28,456,028	8,394,909	6,375,354	3,703,995	1,853,468	82,098,288

(ii) *Totals and Averages, 1931-32 to 1935-36.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for the years 1931-32 to 1935-36. The average wage paid is not comparable with that shown in similar tables in Official Year Books issued prior to No. 23, 1930,

on account of the change in the method of computing the average number of hands employed as explained earlier. The figures are exclusive of working proprietors and of the amounts drawn by them:—

SALARIES AND WAGES PAID IN FACTORIES.—TOTAL AND AVERAGE PER ANNUM PER EMPLOYEE.

Year.	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
1931-32	Total amount paid ..	22,751,073	10,454,045	6,188,880	3,766,056	2,335,684	1,416,131	55,931,818
	Average per employee ..	188.07	100.15	180.57	167.95	186.23	160.76	174.84
1932-33	Total amount paid ..	23,782,848	21,218,271	6,321,021	4,136,857	2,541,438	1,416,011	59,416,436
	Average per employee ..	179.40	154.50	176.82	165.24	182.14	162.85	168.19
1933-34	Total amount paid ..	25,748,547	22,851,649	6,995,340	4,015,081	2,752,540	1,481,503	64,444,060
	Average per employee ..	174.23	153.02	182.82	163.98	183.03	160.56	166.36
1934-35	Total amount paid ..	29,514,013	25,275,044	7,889,535	5,433,531	3,111,239	1,561,217	72,824,549
	Average per employee ..	175.22	156.33	192.38	169.22	185.05	160.36	179.34
1935-36	Total amount paid ..	33,314,534	28,456,028	8,394,909	6,375,354	3,703,995	1,853,468	82,098,288
	Average per employee ..	178.66	162.28	194.66	172.21	187.09	168.33	173.65

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., comprising a heavy percentage of women and children. The highest average wages per employee in 1935-36 were paid in Queensland, followed by Western Australia.

The average rate of salaries and wages reached its maximum in 1927-28 when it amounted to £212.12. After that year there was an almost continuous decline to 1933-34 when the average rate dropped to £166.36. The figure has risen slightly in each of the last two years.

(iii) *Earnings of Males and Females, 1935-36.* The following table shows the approximate amount paid in salaries and wages to males and females in each class of industry in each State in the year 1935-36:—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	717,264	418,585	131,147	99,038	102,519	58,185	1,526,738
II. Bricks, Pottery, Glass, etc. ..	1,169,194	699,329	118,494	143,654	132,652	28,245	2,291,568
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,024,646	1,017,337	85,141	215,329	134,235	18,119	2,494,807
IV. Industrial Metals, Machines, Implements and Conveyances ..	12,843,635	7,622,142	2,087,248	2,962,945	1,143,167	517,540	27,176,677
V. Precious Metals, Jewellery and Plate ..	124,281	261,878	17,065	20,090	11,003	2,842	437,159
VI. Textiles and Textile Goods ..	972,747	1,679,847	767,269	112,666	50,742	128,622	3,011,893
VII. Skins and Leather ..	1,229,746	1,666,016	215,184	126,222	93,382	28,998	3,359,548
VIII. Clothing ..	3,615,442	3,773,607	2,755,960	851,867	590,991	360,268	11,948,135
IX. Food, Drink and Tobacco ..	1,440,472	1,259,264	875,852	267,008	464,330	259,046	4,565,972
X. Woodworking and Basketware ..	821,897	483,739	220,358	132,982	108,936	37,066	1,813,978
XI. Furniture, Bedding, etc. ..	2,342,502	1,965,710	557,864	325,387	289,521	132,942	5,613,926
XII. Paper, Stationery, Printing, Book-binding, etc. ..	461,144	479,936	54,558	15,866	6,886	4,717	1,023,107
XIII. Rubber ..	36,402	16,965	7,945	503	6,032	..	67,847
XIV. Musical Instruments.	330,552	273,769	31,509	33,752	22,685	23,711	715,978
XV. Miscellaneous Products ..	832,690	497,917	274,480	465,521	163,374	49,111	2,283,093
XVI. Heat, Light and Power ..	28,576,202	22,755,111	7,654,082	5,810,399	3,353,526	1,652,851	69,802,171
Total ..	28,576,202	22,755,111	7,654,082	5,810,399	3,353,526	1,652,851	69,802,171

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES.
1935-36—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	6,761	4,526	2,068	610	1,156	536	15,657
II. Bricks, Pottery, Glass, &c. ..	22,130	20,354	3,091	1,681	1,473	231	48,960
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	200,808	205,667	12,633	18,706	8,263	1,571	447,648
IV. Industrial Metals, Machines, Implements and Conveyances ..	330,237	202,058	32,044	75,238	13,004	7,474	660,055
V. Precious Metals, Jewellery and Plate ..	10,893	23,340	514	817	196	..	35,760
VI. Textiles and Textile Goods ..	768,257	1,285,450	40,865	33,864	20,676	89,508	2,238,620
VII. Skins and Leather ..	1,780,058	2,600,046	358,871	250,328	189,203	28,703	5,207,869
VIII. Clothing ..	838,949	663,840	124,833	82,137	58,100	52,554	1,820,413
IX. Food, Drink and Tobacco ..	27,222	14,909	15,201	5,530	1,457	3,081	67,400
X. Woodworking and Basketware ..	90,400	77,900	15,585	7,478	8,176	773	200,312
XI. Furniture, Bedding, &c. ..	424,400	363,010	91,811	50,771	35,007	14,299	980,228
XII. Paper, Stationery, Printing, Book-binding, &c. ..	72,119	28,111	21,372	..	153	325	160,220
XIII. Rubber ..	6,689	156	..	..	..	..	6,845
XIV. Musical Instruments ..	88,149	50,989	3,226	5,709	5,402	665	154,140
XV. Miscellaneous Products ..	4,035	1,095	6,901	14,468	1,035	446	27,080
XVI. Heat, Light and Power ..	..	..	..	..	..	..	..
Total ..	4,738,332	5,700,917	740,827	564,955	350,400	200,617	12,296,117

(iv) Total and Average Earnings of Males and Females, 1931-32 to 1935-36. Particulars for the last five years are given in the table hereunder:—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1931-32. Amount paid .. £	19,258,969	15,105,354	5,651,908	3,393,638	2,076,239	1,231,161	46,737,269
Per cent. on total ..	84.65	77.65	91.32	89.04	88.89	88.35	83.56
Average per employee .. £	225.99	200.27	204.08	191.61	213.43	192.28	210.26
1932-33. Amount paid .. £	20,009,450	16,597,017	5,730,120	3,700,230	2,270,903	1,253,095	49,666,833
Per cent. on total ..	84.51	78.19	90.75	89.66	89.36	88.49	83.59
Average per employee .. £	213.72	194.25	201.02	188.62	208.05	188.75	202.51
1933-34. Amount paid .. £	21,883,356	18,009,598	6,353,917	4,170,047	2,475,698	1,315,417	54,210,933
Per cent. on total ..	85.00	78.81	90.83	90.36	89.94	88.79	84.12
Average per employee .. £	206.98	191.45	208.03	185.58	206.27	182.05	199.32
1934-35. Amount Paid .. £	25,215,937	20,036,314	7,184,443	4,937,285	2,806,476	1,420,620	61,610,075
Per cent. on total ..	85.44	79.27	91.06	90.87	90.20	89.28	84.60
Average per employee .. £	208.57	193.31	219.93	190.22	210.66	183.68	202.48
1935-36. Amount paid .. £	28,576,202	22,755,111	7,654,082	5,810,399	3,353,526	1,652,851	69,802,171
Per cent. on total ..	85.78	79.97	91.18	91.14	90.54	89.18	85.02
Average per employee .. £	212.35	198.85	221.90	193.56	212.76	190.86	206.55

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES—
continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
1931-32. Amount paid .. £	3,492,044	4,348,091	539,951	392,413	259,445	164,970	9,194,549
Per cent. on total ..	15.35	22.35	8.68	10.36	11.11	11.05	16.44
Average per employee £	98.74	94.43	81.61	81.21	92.20	83.11	94.18
1932-33. Amount paid .. £	3,683,392	4,621,254	584,395	427,621	270,525	162,916	9,750,603
Per cent. on total ..	15.49	21.81	9.23	10.34	10.44	11.51	16.41
Average per employee £	95.78	89.07	81.08	79.62	89.05	79.24	90.27
1933-34. Amount paid .. £	3,893,191	4,842,051	641,423	445,034	276,842	166,086	10,234,627
Per cent. on total ..	15.00	21.19	9.17	9.64	10.06	11.21	15.88
Average per employee £	91.88	88.54	82.77	78.43	86.43	81.41	86.69
1934-35. Amount paid .. £	4,208,076	5,238,700	705,092	496,240	304,763	171,597	11,214,474
Per cent. on total ..	14.56	20.73	8.94	9.13	9.80	10.72	15.40
Average per employee £	90.40	90.27	84.51	80.64	87.30	77.93	89.17
1935-36. Amount paid .. £	4,738,332	5,700,917	740,827	564,955	350,469	200,617	12,296,117
Per cent. on total ..	14.22	20.03	8.82	8.86	9.46	10.82	14.98
Average per employee £	91.30	93.58	85.80	80.70	86.84	85.33	91.19

(v) *Managers, Overseers and Other Employees.* A further analysis of salaries and wages paid is given in the following table, the amounts paid to managers, overseers, &c., being differentiated from those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

SALARIES AND WAGES.—MANAGERS, OVERSEERS AND OTHER FACTORY
EMPLOYEES, AUSTRALIA, 1935-36.

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants and Clerks.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
	£	£	£	£	£	£	£
I. Treatment of Non-metallic Mineral and Quarry Products ..	221,901	15,092	1,304,837	565	1,526,738	15,657	1,542,395
II. Bricks, Pottery, Glass, &c. ..	280,680	24,025	2,010,888	24,935	2,291,568	48,960	2,340,528
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	616,861	108,524	1,877,946	339,124	2,494,807	447,648	2,942,455
IV. Industrial Metals, Machines, Implements and Conveyances ..	3,220,379	332,030	23,956,298	328,025	27,176,677	660,055	27,836,732
V. Precious Metals, Jewellery and Plate ..	44,647	9,904	392,512	25,856	437,159	35,760	472,919
VI. Textiles and Textile Goods ..	594,694	129,797	2,417,199	2,108,823	3,011,893	2,238,620	5,250,513
VII. Skins and Leather ..	184,553	23,543	1,287,192	164,477	1,471,745	188,020	1,659,765
VIII. Clothing ..	517,179	307,904	2,842,369	4,899,965	3,359,548	5,207,869	8,567,417
IX. Food, Drink and Tobacco ..	2,458,285	348,625	9,489,850	1,471,788	11,948,135	1,820,413	13,768,548
X. Woodworking and Basketware ..	504,524	52,831	4,061,448	14,569	4,565,972	67,400	4,633,372
XI. Furniture, Bedding, &c. ..	169,233	37,750	1,644,745	162,562	1,813,978	200,312	2,014,290
XII. Paper, Stationery, Printing, Book-binding, &c. ..	1,001,501	229,333	4,612,425	750,895	5,613,926	980,228	6,594,154
XIII. Rubber ..	221,379	31,119	790,073	193,091	1,023,107	199,219	1,222,326
XIV. Musical Instruments ..	12,292	2,991	55,555	3,854	67,847	6,845	74,692
XV. Miscellaneous Products ..	132,422	27,865	583,556	126,275	715,978	154,140	870,118
XVI. Heat, Light and Power ..	503,224	26,862	1,779,869	1,118	2,283,003	27,980	2,311,073
Total ..	10,689,254	1,709,595	59,112,917	10,586,522	69,802,171	12,206,117	82,098,288
Average paid per employee ..	335.91	126.35	193.11	87.27	206.5	91.19	173.65

3. *Value of Power, Fuel and Light Used.*—(i) *Total Amount, 1935-36.* The expenditure by factories on power, fuel and light is of considerable importance; in 1935-36 it amounted to £13,276,295, an increase of £938,088 as compared with the previous year. The following table shows the value of power, fuel and light used in the different classes of industry in 1935-36:—

VALUE OF POWER, FUEL AND LIGHT USED(a) IN FACTORIES, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metallicferous Mine and Quarry Products ..	234,090	186,064	46,629	38,764	75,033	66,803	647,383
II. Bricks, Pottery, Glass, etc. ..	377,522	249,662	34,104	51,333	52,184	12,405	777,230
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	187,243	219,317	13,005	42,250	27,209	3,234	492,258
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,486,266	506,057	177,627	331,579	73,079	346,086	3,920,694
V. Precious Metals, Jewellery and Plate ..	7,590	14,874	715	1,598	454	164	25,395
VI. Textiles and Textile Goods ..	182,269	315,342	8,789	22,988	10,805	45,545	585,738
VII. Skins and Leather ..	71,169	68,266	18,999	1,681	2,180	780	163,075
VIII. Clothing ..	89,393	128,362	14,917	13,272	7,790	1,905	255,609
IX. Food, Drink and Tobacco ..	767,137	734,147	404,627	181,001	132,465	76,049	2,295,426
X. Woodworking and Basketware ..	78,148	71,775	46,580	14,023	30,447	24,537	265,510
XI. Furniture, Bedding, etc. ..	31,394	26,627	8,619	8,082	3,702	2,042	80,466
XII. Paper, Stationery, Printing, Book-binding, etc. ..	132,484	172,809	30,215	14,670	16,504	6,687	373,369
XIII. Rubber ..	84,189	119,057	7,234	2,154	1,206	825	214,665
XIV. Musical Instruments ..	3,402	271	106	3	47	..	3,829
XV. Miscellaneous Products ..	25,088	29,707	1,099	1,667	1,300	602	59,523
XVI. Heat, Light and Power ..	1,516,131	662,984	267,260	247,551	417,922	4,277	3,116,125
Total ..	6,273,485	3,505,321	1,080,525	972,636	852,327	592,001	13,276,295

(a) Including lubricants and water.

(ii) *Total Amount according to Sources, 1935-36.* The following table shows the value of power, fuel and light used in factories in each State during the year 1935-36 distributed amongst the various sources:—

VALUE OF POWER, FUEL AND LIGHT USED IN FACTORIES, 1935-36.

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Coal ..	1,818,167	1,202,056	452,512	271,066	246,792	83,656	4,074,249
Coke ..	1,126,134	279,252	85,598	146,950	28,282	30,711	1,696,927
Wood ..	101,239	187,242	113,470	58,545	147,811	28,002	636,309
Charcoal ..	(a) 69,583	(b)	2,047	1,228	2,025	58	74,941
Fuel Oil ..	390,490	248,692	70,407	104,181	160,430	9,360	983,560
Gas ..	423,709	128,785	22,118	30,267	12,625	1,282	618,786
Electricity ..	1,915,737	1,099,070	206,258	296,479	178,000	220,653	3,916,137
Water and Lubricating Oil ..	428,426	360,224	128,115	63,980	76,362	218,279	1,275,386
Total ..	6,273,485	3,505,321	1,080,525	972,636	852,327	592,001	13,276,295

(a) Including Other.

(b) Not available, included with Coke.

SALARIES AND WAGES PAID AND VALUE OF PRODUCTION.

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(iii) *Total Amount, 1931-32 to 1935-30.* The next table gives the sums expended on power, fuel and light during the last five years :—

VALUE OF POWER, FUEL AND LIGHT USED IN FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1931-32 ..	4,229,325	2,704,791	766,501	748,814	564,057	451,222	9,464,710
1932-33 ..	4,791,381	2,923,230	905,893	764,930	598,088	402,050	10,446,172
1933-34 ..	5,239,416	3,069,749	971,680	827,049	641,324	485,663	11,214,881
1934-35 ..	5,000,307	3,323,892	1,051,474	800,307	702,375	487,592	12,338,207
1935-36 ..	6,273,485	3,505,321	1,080,525	972,636	852,327	592,001	13,276,295

4. *Value of Materials Used.*—(i) *Total Amount, 1935-30.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1935-30 was £238,974,797, representing 57.63 per cent. of the value of the final output. (See par. 5.) The table hereunder shows the value of the materials used in various classes of industry in each State :—

VALUE OF MATERIALS USED IN FACTORIES, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,799,180	899,843	227,994	112,791	177,701	102,661	3,320,170
II. Bricks, Pottery, Glass, etc. ..	787,142	403,060	48,799	130,459	99,813	19,102	1,488,375
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	6,387,091	4,491,536	430,844	1,071,929	1,101,023	105,272	13,587,695
IV. Industrial Metals, Machines, Implements and Conveyances ..	33,149,593	10,141,403	2,472,501	7,646,452	1,201,486	1,130,418	55,741,853
V. Precious Metals, Jewellery and Plate ..	133,008	420,311	7,659	17,631	6,785	412	585,806
VI. Textiles and Textile Goods ..	4,938,182	7,385,533	502,086	879,038	379,131	448,314	14,532,884
VII. Skins and Leather ..	4,042,562	2,847,625	1,362,751	117,629	116,097	8,530	8,495,194
VIII. Clothing ..	5,580,110	8,976,122	1,014,170	463,073	392,752	71,548	16,497,775
IX. Food, Drink and Tobacco ..	29,205,968	31,202,570	21,605,632	6,932,486	4,223,163	1,765,937	94,935,756
X. Woodworking and Basketware ..	3,873,225	2,126,359	1,993,113	911,517	781,539	343,622	10,029,375
XI. Furniture, Bedding, etc. ..	1,918,265	1,198,327	382,390	265,924	232,548	42,403	4,039,857
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,714,368	3,321,062	549,213	433,037	292,669	97,060	8,407,409
XIII. Rubber ..	1,613,619	1,572,955	89,422	30,022	15,886	6,777	3,328,681
XIV. Musical Instruments ..	37,555	7,359	2,437	151	942	..	17,817
XV. Miscellaneous Products ..	853,713	776,629	40,530	77,039	54,174	23,888	1,825,973
XVI. Heat, Light and Power ..	916,740	723,465	171,500	172,569	96,796	29,077	2,110,147
Total ..	98,950,321	76,494,159	30,901,341	19,261,750	9,172,205	4,195,021	238,974,797

(ii) *Total Amount, 1931-32 to 1935-30.* The following table gives the value of materials used in factories for the last five years :—

VALUE OF MATERIALS USED IN FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1931-32 ..	63,556,701	52,864,198	24,015,316	11,581,708	6,017,750	3,163,572	101,199,245
1932-33 ..	70,084,956	58,081,097	24,772,613	12,321,268	6,667,618	3,220,906	175,148,548
1933-34 ..	77,330,401	61,224,916	27,758,597	13,450,771	6,791,684	3,270,895	189,827,264
1934-35 ..	87,096,873	65,006,374	30,346,510	15,475,492	7,654,382	3,577,386	209,047,017
1935-36 ..	98,950,321	76,494,159	30,901,341	19,261,750	9,172,205	4,195,021	238,974,797

5. Total Value of Output.—(i) *Total, 1935-36.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1935-36 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but include also the value of the raw materials, and the power, fuel and light used. The difference between the sum of the values of the materials and the fuel and light used, and the total output (see par. 6) is the real value of factory production.

TOTAL VALUE OF OUTPUT OF FACTORIES, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	£ 3,712,195	£ 2,308,109	£ 585,218	£ 356,260	£ 474,885	£ 356,945	£ 7,793,612
II. Bricks, Pottery, Glass, etc. ..	3,323,689	1,878,773	297,804	474,778	382,462	71,978	6,429,484
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	11,929,827	7,850,284	766,351	1,685,927	1,443,549	168,721	23,844,659
IV. Industrial Metals, Machines, Implements and Conveyances ..	57,776,982	22,565,640	6,142,067	12,653,502	3,168,460	2,658,753	104,965,404
V. Precious Metals, Jewellery and Plate ..	370,214	904,487	42,619	56,174	26,342	4,514	1,404,350
VI. Textiles and Textile Goods ..	8,315,687	13,087,825	694,303	1,137,295	515,456	962,531	24,713,097
VII. Skins and Leather ..	5,492,886	10,857,644	1,687,444	2,042,307	1,142,235	18,179	11,720,695
VIII. Clothing ..	10,518,907	16,123,208	2,016,142	1,074,727	872,891	162,422	30,768,297
IX. Food, Drink and Tobacco ..	42,792,046	42,817,086	27,860,778	9,398,397	6,347,980	2,556,919	131,773,206
X. Woodworking and Basketware ..	6,339,862	4,290,263	3,465,351	1,399,655	1,538,091	756,489	17,789,711
XI. Furniture, Bedding, etc. ..	3,391,256	2,448,374	768,164	496,246	435,994	99,696	7,639,430
XII. Paper, Stationery, Printing, Book-binding, etc. ..	9,011,003	7,228,011	1,200,243	1,000,240	581,511	111,003	20,202,009
XIII. Rubber ..	2,350,000	3,041,000	205,000	100,000	37,115	10,553	5,804,558
XIV. Musical Instruments ..	127,532	33,078	12,757	1,755	9,027	..	184,149
XV. Miscellaneous Products ..	1,791,976	1,522,377	106,316	166,643	114,498	49,435	3,751,245
XVI. Heat, Light and Power ..	7,432,643	3,183,472	1,308,218	1,643,179	1,087,135	558,842	15,213,489
Total ..	174,693,761	134,043,170	47,664,810	31,904,091	17,528,741	8,853,882	414,688,455

(ii) *Total 1931-32 to 1935-36.* The following statement shows the value of output of factories in each State in the five years ended 1935-36:—

TOTAL VALUE OF OUTPUT OF FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1931-32 ..	114,439,507	93,388,617	36,915,173	19,292,370	11,186,941	6,423,177	281,645,785
1932-33 ..	124,445,767	102,085,429	38,435,343	20,940,698	12,327,543	6,563,083	304,797,868
1933-34 ..	130,611,971	108,496,310	42,442,785	22,919,297	12,877,288	6,786,409	330,134,060
1934-35 ..	151,133,218	117,182,857	46,021,303	25,099,172	14,041,680	7,223,124	305,201,354
1935-36 ..	174,693,761	134,043,170	47,664,810	31,904,091	17,528,741	8,853,882	414,688,455

6. Value of Production.—(i) *Total in Classes, 1935-36.* The value of production for any industry was defined by the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production."

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the "value of output". All these deductions with the exception of depreciation are included in the items "value of materials used" and "value of fuel used" as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was subsequently agreed that the particulars obtained should be published but that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained, therefore, by deducting "value of materials used" and "value of fuel used" from the "value of the output."

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 8 par. 4, was estimated at £8,783,892 for 1935-36. Many miscellaneous expenses, also, such as insurance and advertising, have not been taken into account. Hence, it must not be inferred that when wages and salaries are deducted from value of production, the whole of the "surplus" is available for interest and profit.

The following table shows the value of production in 1935-36 in each State for the various classes of factories :—

VALUE OF PRODUCTION, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	1,678,925	1,222,202	310,595	204,705	222,151	187,481	3,826,059
II. Bricks, Pottery, Glass, etc.	2,159,025	1,226,051	214,901	292,606	230,165	40,171	4,103,879
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,355,493	3,139,431	322,502	571,748	315,317	60,215	9,764,706
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,111,123	1,918,180	3,191,939	4,075,171	1,893,895	1,182,149	15,302,857
V. Precious Metals, Jewellery and Plate	229,616	469,302	34,245	36,945	19,103	3,938	793,149
VI. Textiles and Textile Goods ..	3,195,236	5,380,950	182,828	233,269	125,520	468,072	9,594,475
VII. Skins and Leather ..	1,288,855	1,342,023	275,604	83,497	71,858	5,869	3,007,796
VIII. Clothing ..	4,849,434	7,018,724	987,955	598,382	472,349	88,969	14,014,913
IX. Food, Drink and Tobacco ..	12,818,911	10,880,369	5,850,519	2,281,910	1,992,352	711,933	31,512,021
X. Woodworking and Basketware ..	2,388,189	2,092,120	1,425,652	474,115	726,105	388,430	7,191,826
XI. Furniture, Bedding, etc. ..	1,441,597	1,223,420	377,155	222,240	199,444	55,251	3,519,107
XII. Paper, Stationery, Printing, Book-binding, etc. ..	5,164,841	4,231,149	1,096,805	612,529	571,318	308,138	12,017,821
XIII. Rubber ..	758,858	1,355,257	108,389	34,334	21,523	11,951	2,350,312
XIV. Musical Instruments	86,575	25,448	10,514	1,598	8,338	..	132,473
XV. Miscellaneous Products ..	913,175	716,041	64,687	87,937	59,024	24,885	1,865,749
XVI. Heat, Light and Power ..	4,999,772	1,797,023	869,458	1,223,059	572,417	525,488	9,987,217
Total ..	69,469,955	54,043,690	15,682,941	11,669,705	7,504,209	4,066,860	162,437,363

(ii) *Total and Averages, 1931-32 to 1935-36.* The value of production and the amount per employee and per head of population are shown in the following table for the years specified :—

FACTORIES.—VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
	£	£	£	£	£	£	£
1931-32 ..	46,653,481	37,819,628	12,133,356	6,961,848	4,605,134	2,808,383	110,981,830
1932-33 ..	49,569,430	41,081,102	12,756,837	7,854,500	5,061,342	2,879,437	119,203,148
1933-34 ..	54,042,154	44,201,045	13,712,508	8,641,477	5,444,280	3,047,551	129,091,015
1934-35 ..	61,430,068	48,762,591	14,623,319	9,557,113	6,284,923	3,158,146	143,816,160
1935-36 ..	69,469,955	54,043,090	15,682,944	11,669,705	7,504,209	4,066,860	162,437,363

PER EMPLOYEE(a)

	£	£	£	£	£	£	£
1931-32 ..	369	295	339	292	344	312	330
1932-33 ..	358	284	341	298	342	312	321
1933-34 ..	351	283	342	293	337	312	318
1934-35 ..	351	287	340	285	354	299	320
1935-36 ..	360	295	348	303	357	351	330

PER HEAD OF POPULATION.

	£	£	£	£	£	£	£
1931-32 ..	18.17	20.96	13.04	12.07	10.62	12.42	16.94
1932-33 ..	19.13	22.64	13.56	13.55	11.59	12.63	18.05
1933-34 ..	20.68	24.22	14.43	14.84	12.36	13.32	19.40
1934-35 ..	23.62	26.55	15.22	16.36	14.18	13.78	21.46
1935-36 ..	26.15	29.32	16.13	19.91	16.76	17.66	24.06

(a) Including Working Proprietors.

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1935-36 was estimated at £414,688,455, there remained, after payment of £238,974,797, the value of the materials used, of £82,098,288 for salaries and wages, and of £13,276,295 for fuel, the sum of £80,339,075 to provide for all other expenditure, depreciation, interest and profits. The following table gives corresponding particulars for each State expressed absolutely and as percentages on the total value of the output for the year 1935-36 :—

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1935-36.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
	£	£	£	£	£
New South Wales ..	68,950,321	9,273,485	33,314,534	30,155,421	174,003,791
Victoria ..	76,494,159	3,505,321	28,456,028	25,587,662	134,043,170
Queensland ..	30,901,341	1,080,525	8,394,909	7,288,035	47,664,810
South Australia ..	19,261,750	972,636	6,375,354	5,294,351	31,904,091
Western Australia ..	9,172,205	852,327	3,793,995	3,800,214	17,528,741
Tasmania ..	4,195,021	592,001	1,853,468	2,213,392	8,853,882
Australia ..	238,974,797	13,276,295	82,098,288	80,339,075	414,688,455

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.

(b) Including lubricants and water.

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1935-36.—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.					
	%	%	%	%	%
New South Wales ..	56.64	3.59	19.07	20.70	100.00
Victoria ..	57.07	2.61	21.23	19.09	100.00
Queensland ..	64.83	2.27	17.61	15.29	100.00
South Australia ..	60.37	3.05	19.98	16.60	100.00
Western Australia ..	52.33	4.86	21.13	21.68	100.00
Tasmania ..	47.38	6.69	20.93	25.00	100.00
Australia ..	57.63	3.20	19.80	19.37	100.00

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.

(b) Including lubricants and water.

§ 8. Value of Land, Buildings, Plant and Machinery.

1. *General.*—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1935-36:—

VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY, 1935-36.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	49,494,222	37,678,298	10,514,513	8,268,807	5,978,111	2,675,951	114,609,902
Plant and machinery	51,964,982	34,194,608	17,736,543	9,280,335	6,063,901	5,990,722	125,231,091
Total ..	101,459,204	71,872,906	28,251,056	17,549,142	12,042,012	8,666,673	239,840,993

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. *Value of Land and Buildings.*—(i) *Total, Australia, 1931-32 to 1935-36.* The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1931-32 to 1935-36 inclusive:—

VALUE OF LAND AND BUILDINGS.—AUSTRALIA.

Class of Industry.	1931-32.	*1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,392,522	2,396,967	2,415,120	2,409,200	2,412,145
II. Bricks, Pottery, Glass, etc.	1,992,755	2,214,761	2,376,697	2,558,791	2,706,575
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,779,483	5,832,064	5,903,867	6,129,525	6,398,332
IV. Industrial Metals, Machines, Implements and Conveyances ..	25,582,740	25,632,777	25,877,989	26,718,722	27,873,261
V. Precious Metals, Jewellery and Plate ..	510,746	490,511	518,293	536,745	561,735
VI. Textiles and Textile Goods ..	4,739,366	4,993,710	5,106,496	5,169,116	5,447,893
VII. Skins and Leather ..	1,778,219	1,708,577	1,799,389	1,799,007	1,798,385
VIII. Clothing ..	9,334,049	8,894,673	9,059,219	9,571,442	9,759,733
IX. Food, Drink and Tobacco ..	26,676,269	26,645,468	27,006,548	27,949,389	28,928,077
X. Woodworking and Basketware ..	3,601,684	3,506,666	3,486,892	3,694,166	3,769,305
XI. Furniture, Bedding, etc.	1,978,384	1,869,195	1,963,269	2,056,015	2,109,782
XII. Paper, Stationery, Printing, Bookbinding, etc.	9,187,481	9,048,534	9,093,698	9,221,906	9,504,871
XIII. Rubber ..	2,078,335	1,853,590	1,803,051	1,846,107	1,800,048
XIV. Musical Instruments ..	313,313	212,112	144,215	122,587	113,928
XV. Miscellaneous Products ..	1,028,693	1,014,793	1,063,804	1,114,681	1,213,607
XVI. Heat, Light and Power ..	9,616,285	9,462,594	9,838,768	9,947,961	9,904,655
Total ..	106,590,324	105,836,872	107,537,806	110,840,657	114,609,902

(ii) *Value in each State, 1935-36.* The following table gives similar information for each State for 1935-36:—

VALUE OF LAND AND BUILDINGS, 1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,048,716	787,756	170,154	154,478	69,602	181,430	2,412,145
II. Bricks, Pottery, Glass, etc.	1,547,969	733,593	105,598	173,213	127,732	18,470	2,706,575
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,357,874	2,687,641	162,651	431,377	674,867	80,922	6,398,332
IV. Industrial Metals, Machines, Implements and Conveyances ..	13,858,114	7,607,424	1,994,886	2,325,552	1,379,788	647,497	27,873,261
V. Precious Metals, Jewellery and Plate ..	182,308	276,973	24,014	35,135	27,810	15,495	561,735
VI. Textiles and Textile Goods ..	1,789,317	3,025,991	122,282	159,795	89,004	260,454	5,447,893
VII. Skins and Leather ..	705,378	840,003	120,802	88,093	17,374	11,175	1,798,385
VIII. Clothing ..	3,743,393	4,120,444	520,563	548,122	141,050	108,315	9,759,733
IX. Food, Drink and Tobacco ..	10,395,001	8,589,804	4,975,480	2,430,548	1,606,664	931,474	28,928,977
X. Woodworking and Basketware ..	1,600,835	935,361	464,197	298,471	299,205	171,276	3,769,305
XI. Furniture, Bedding, etc.	845,686	801,969	220,162	155,770	136,953	36,212	2,196,782
XII. Paper, Stationery, Printing, Bookbinding, etc.	4,097,946	3,142,093	815,399	723,539	667,472	118,412	9,504,871
XIII. Rubber ..	811,841	812,203	85,147	53,720	31,377	11,770	1,800,048
XIV. Musical Instruments ..	67,292	33,700	9,890	1,470	6,680	..	113,928
XV. Miscellaneous Products ..	603,666	430,164	62,307	58,190	41,128	9,176	1,213,607
XVI. Heat, Light and Power ..	5,804,236	2,530,313	646,065	660,718	276,779	76,544	9,904,655
Total ..	40,404,222	37,678,208	10,514,513	8,268,807	5,078,111	2,675,951	114,609,902

(iii) *Value in each State, 1931-32 to 1935-36.* The total value of factory land and buildings for each year from 1931-32 to 1935-36 is given hereunder:—

VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1931-32 ..	46,462,828	34,868,960	8,980,620	8,032,264	5,470,954	2,774,698	106,590,324
1932-33 ..	45,873,565	34,804,987	9,075,590	7,915,965	5,537,227	2,629,532	105,836,871
1933-34 ..	46,210,223	35,563,879	9,461,870	7,983,314	5,581,057	2,630,761	107,537,806
1934-35 ..	47,937,192	36,644,621	9,942,803	7,947,825	5,673,401	2,694,755	110,840,057
1935-36 ..	49,194,222	37,673,298	10,514,513	8,268,807	5,978,111	2,075,951	111,609,952

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ending 1932-33, however, there was a decline of £12 million to £105.8 million, but during the next three years the value had risen to £114.6 million.

3. *Value of Plant and Machinery.*—(i) *Total, Australia, 1931-32 to 1935-36.* The following table shows for Australia the approximate value of plant and machinery used in factories in each of the years specified:—

VALUE OF PLANT AND MACHINERY.—AUSTRALIA.

Class of Industry.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	5,773,446	5,517,010	5,373,802	5,279,528	5,249,528
II. Bricks, Pottery, Glass, etc. ..	1,974,507	2,291,788	2,414,175	2,649,482	2,865,499
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,729,195	5,537,025	5,386,426	5,638,866	5,722,327
IV. Industrial Metals, Machines, Implements and Conveyances ..	24,665,290	24,916,610	24,611,820	24,976,454	25,604,490
V. Precious Metals, Jewellery and Plate ..	139,441	141,446	148,402	162,129	175,884
VII. Textiles and Textile Goods ..	5,638,054	5,743,596	5,751,145	5,799,227	6,052,307
VII. Skins and Leather ..	916,635	905,709	913,723	892,370	808,598
VIII. Clothing ..	2,211,284	2,054,915	2,061,074	2,180,610	2,256,609
IX. Food, Drink and Tobacco ..	28,176,453	27,618,639	27,305,642	29,207,778	30,041,612
X. Woodworking and Basketware ..	3,498,591	3,318,657	3,326,466	3,490,416	3,629,550
XI. Furniture, Bedding, etc. ..	672,169	645,200	679,254	661,680	678,720
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	7,310,058	7,111,322	7,139,924	7,108,001	7,532,292
XIII. Rubber ..	2,029,401	1,749,634	1,710,597	1,639,724	1,464,225
XIV. Musical Instruments ..	162,496	93,230	33,582	24,209	18,157
XV. Miscellaneous Products ..	507,754	545,511	560,737	580,623	579,858
XVI. Heat, Light and Power ..	32,124,553	32,359,565	32,791,301	32,119,558	32,101,183
Total	121,529,377	120,549,857	120,208,128	122,640,955	125,231,091

The maximum amount invested in plant and machinery was £127.6 million in 1929-30. The amount declined to £120.2 million during the next four years, but has since risen to £125.2 million.

(ii) *Value in each State 1931-32 to 1935-36.* The following table shows the value of plant and machinery in each State during the last five years. It will be noted that the chief increases during the year 1935-36 were recorded in New South Wales and Queensland:—

VALUE OF PLANT AND MACHINERY.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1931-32 ..	50,277,992	33,481,615	15,743,919	9,624,637	5,945,468	6,455,746	121,529,377
1932-33 ..	49,903,177	33,022,441	16,408,197	9,450,517	5,733,638	6,031,887	120,549,857
1933-34 ..	49,083,921	33,270,400	16,891,339	9,161,672	5,678,638	6,122,158	120,208,128
1934-35 ..	50,453,590	33,947,056	17,114,417	9,293,448	5,763,428	6,069,016	122,640,955
1935-36 ..	51,964,982	34,194,608	17,736,543	9,280,335	6,063,901	5,990,722	125,231,091

(iii) *Value according to Industry, 1935-36.* The following table shows the value of plant and machinery used in factories in each State during 1935-36, classified according to industry:—

VALUE OF PLANT AND MACHINERY.—1935-36.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,009,845	1,808,002	237,422	23,577	173,202	187,208	5,249,528
II. Bricks, Pottery, Glass, etc. ..	1,633,332	710,419	120,482	10,155	104,133	27,583	2,865,499
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,568,502	2,422,313	111,802	700,070	810,065	42,606	5,722,327
IV. Industrial Metals, Machines, Implements and Conveyances ..	15,175,750	4,798,701	1,097,945	1,938,037	820,675	1,172,716	25,604,490
V. Precious Metals, Jewellery and Plate ..	58,567	98,154	4,008	9,153	3,470	1,902	175,884
VI. Textiles and Textile Goods ..	1,825,900	3,484,958	142,424	208,087	113,680	277,258	6,052,307
VII. Skins and Leather ..	351,512	377,148	111,011	16,249	35,521	4,154	898,598
VIII. Clothing ..	795,357	1,125,974	169,596	81,169	70,622	13,651	2,256,669
IX. Food, Drink and Tobacco ..	8,957,494	6,627,793	10,751,496	1,828,322	1,459,496	417,011	30,041,612
X. Woodworking and Basketware ..	999,068	861,590	699,799	212,120	621,874	234,881	3,629,550
XI. Furniture, Bedding, etc. ..	268,580	200,808	77,798	11,553	41,117	15,848	678,710
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,308,480	2,024,001	581,448	537,004	307,013	114,356	7,532,292
XIII. Rubber ..	550,120	82,008	30,912	12,708	7,073	5,229	1,464,225
XIV. Musical Instruments ..	12,283	5,000	258	60	537	..	18,157
XV. Miscellaneous Products ..	238,541	284,163	16,728	18,110	15,869	6,447	579,858
XVI. Heat, Light and Power ..	13,311,579	8,203,543	2,967,811	3,149,626	1,358,954	3,469,872	32,461,385
Total ..	51,964,982	34,194,608	17,736,543	9,280,335	6,063,901	5,990,722	125,231,091

4. Depreciation of Land and Buildings and Plant and Machinery.—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State during the year 1935-36. Information in respect of the industries in South Australia is not available and the particulars shown have been estimated from the rates experienced in the other five States.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY.—1935-36.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Australia. (a)
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	248,371	82,991	27,104	22,154	24,868	32,704	438,192
II. Bricks, Pottery, Glass, etc. ..	133,771	47,853	8,772	14,888	18,859	1,422	225,565
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	229,150	216,772	15,942	56,056	43,338	4,299	565,557
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,043,652	355,386	123,900	146,528	70,250	97,906	1,837,622
V. Precious Metals, Jewellery and Plate ..	3,972	6,893	277	778	960	75	12,955
VI. Textiles and Textile Goods ..	146,366	400,526	6,874	19,583	7,485	31,321	612,155
VII. Skins and Leather ..	41,974	30,147	8,248	2,262	2,692	288	85,911
VIII. Clothing ..	74,531	122,080	9,436	12,410	16,529	1,250	236,851
IX. Food, Drink and Tobacco ..	547,945	583,064	618,089	140,558	124,199	47,407	2,070,862
X. Woodworking and Basketware ..	97,845	68,703	63,229	21,840	46,473	18,336	316,432
XI. Furniture, Bedding, etc. ..	20,380	19,493	10,240	5,532	6,048	1,372	69,065
XII. Paper, Stationery, Printing, Book-Binding, etc. ..	258,100	239,159	52,462	48,175	45,621	9,853	653,370
XIII. Rubber ..	98,442	87,138	2,050	3,886	1,792	639	194,817
XIV. Musical Instruments ..	4,511	303	12	58	175	..	5,059
XV. Miscellaneous Products ..	26,173	32,144	1,432	2,815	2,724	874	66,162
XVI. Heat, Light and Power ..	650,380	234,895	218,345	125,045	76,316	88,300	1,393,287
Total ..	3,631,563	2,528,447	1,167,912	631,583	488,329	336,051	8,783,892

(a) See par. above.

§ 9. Individual Industries.

1. General.—The preceding pages afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account in respect of all industries, particular industries, which are of special importance by reason of the employment which they provide for labour and capital or other features of special interest, are dealt with hereunder. Where there are only one or two establishments of a particular class in any State, returns of output are not published but are combined with some other factory group so that the operations of individual concerns will not be disclosed.

The figures presented hereafter show that practically all the industries reviewed have recovered from the depression of recent years.

2. **Chemicals, Drugs and Medicines.**—(i) *Details for each State, 1935-36.* This industry is the most important in Class III. and details for each State during the year 1935-36 are shown in the following table:—

CHEMICALS, DRUGS AND MEDICINES, 1935-36.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	109	73	13	7	8	4	214
Number of employees ..	2,370	1,652	182	266	121	28	4,610
Average horse-power of engines used ..	3,911	4,122	272	511	275	12	9,103
Approx. value of land and buildings ..	£ 824,953	549,371	62,813	61,110	43,219	14,779	1,556,254
Approx. value of plant and machinery ..	£ 495,866	333,174	46,262	51,381	59,503	514	986,700
Wages paid ..	£ 405,030	291,165	31,516	33,511	18,437	3,252	786,211
Value of fuel used ..	£ 54,882	31,572	4,500	4,887	3,335	211	99,376
Value of materials used ..	£ 1,531,500	889,035	94,873	156,387	67,346	11,846	2,751,056
Total value of output ..	£ 3,419,170	1,724,492	108,128	244,830	112,716	10,300	5,723,675
Value of production ..	£ 1,832,719	808,885	98,716	83,595	42,035	7,243	2,873,243

(a) Includes Explosives.

(ii) *Total for Australia, 1931-32 to 1935-36.* In the returns for Australia shown in the following table it will be seen that the industry has made consistent progress during each of the last four years:—

CHEMICALS, DRUGS AND MEDICINES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	177	182	190	203	214
Number of employees ..	3,295	3,524	3,852	4,251	4,610
Average horse-power of engines used ..	7,394	7,637	7,966	8,429	9,103
Approx. value of land and buildings ..	£ 1,300,194	1,297,851	1,350,042	1,435,705	1,556,254
Approx. value of plant and machinery ..	£ 842,143	820,679	832,532	929,216	986,700
Wages paid ..	£ 591,671	613,270	651,557	713,018	786,211
Value of fuel used ..	£ 67,030	77,499	84,127	99,732	99,376
Value of materials used ..	£ 2,045,829	2,121,117	2,287,226	2,441,380	2,751,056
Total value of output ..	£ 4,112,452	4,281,625	4,828,851	5,171,339	5,723,675
Value of production ..	£ 1,999,593	2,083,009	2,457,498	2,639,227	2,873,243

3. **Soap and Candle Factories.**—(i) *Details for each State, 1935-36.* The manufacture of these products is frequently carried on in the same factory, so that separate returns cannot be obtained; the manufacture of soap is, however, the more important. The following table gives particulars of soap and candle factories in each State for the year 1935-36:—

SOAP AND CANDLE FACTORIES, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	24	20	12	4	4	2	66
Number of employees ..	1,081	680	187	151	56	28	2,183
Average horse-power of engines used ..	1,657	769	232	207	(a)	(a)	3,051
Approx. value of land and buildings ..	£ 296,170	195,054	35,721	66,127	(a)	(a)	613,717
Approx. value of plant and machinery ..	£ 210,454	197,518	27,734	54,130	(a)	(a)	514,845
Wages paid ..	£ 194,926	119,450	32,803	23,071	(a)	(a)	385,431
Value of fuel used ..	£ 25,636	42,600	3,102	2,527	(a)	(a)	76,340
Value of materials used ..	£ 849,198	571,226	99,170	93,745	(a)	(a)	1,608,885
Total value of output ..	£ 1,914,482	1,013,180	177,991	125,720	(a)	(a)	3,107,553
Value of production ..	£ 769,548	399,345	75,422	62,488	(a)	(a)	1,311,378

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1931-32 to 1935-36.* The next table gives similar particulars for the last five years for Australia :—

SOAP AND CANDLE FACTORIES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	68	64	71	67	66
Number of employees	2,106	2,010	1,985	2,044	2,183
Average horse-power of engines used	2,579	2,453	2,537	2,443	3,051
Approx. value of land and buildings £	667,948	656,181	640,603	626,281	613,717
Approx. value of plant and machinery £	617,932	618,337	573,905	530,298	514,845
Wages paid	£ 384,410	399,397	338,517	354,011	385,431
Value of fuel used	£ 72,439	62,545	58,741	56,774	76,340
Value of materials used	£ 1,486,457	1,408,015	1,365,699	1,445,528	1,689,835
Total value of output	£ 2,875,670	2,664,778	2,696,606	2,917,802	3,107,553
Value of production	£ 1,316,774	1,194,218	1,272,166	1,415,500	1,347,378

(iii) *Raw Material Used and Production, 1931-32 to 1935-36.* The following statement shows the quantities of certain raw material used and the production in soap and candle factories in Australia for the last five years :—

SOAP AND CANDLE FACTORIES.—RAW MATERIAL USED AND PRODUCTION, AUSTRALIA.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Tallow used cwt.	503,501	499,188	492,624	511,936	491,423
Alkali used	249,858	236,937	264,576	264,147	288,461
Copra oil used	79,147	74,362	80,150	92,952	125,518
Soap made	964,476	924,403	891,832	932,252	954,082
Candles made	55,150	49,562	51,598	48,398	39,937

The output for the year 1935-36 comprised the following quantities of soap :— Household, 735,122 cwt.; toilet, 104,709 cwt.; sand, 92,342 cwt.; soft, 15,692 cwt.; and other, 6,817 cwt.

4. *Chemical Fertilizers.*—(i) *Details for each State, 1935-36.* The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during the year 1935-36. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX.—Agriculture.

CHEMICAL FERTILIZERS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	4	5	5	7	5	7	33
Number of employees	163	799	76	572	353	33	1,990
Average horse-power of engines used	801	2,855	485	3,467	2,500	174	10,282
Approximate value of land and buildings £	82,210	499,199	14,053	211,957	523,924	47,293	1,378,636
Approximate value of plant and machinery £	78,273	748,506	17,585	581,604	668,796	32,349	2,127,113
Wages paid	£ 40,101	177,984	15,327	113,429	87,782	7,429	442,052
Value of fuel used	£ 9,128	37,689	1,275	23,119	16,794	671	88,676
Value of materials used	£ 289,177	999,679	117,223	191,160	810,152	61,840	2,389,251
Total value of output	£ 466,367	1,381,582	214,347	751,630	906,958	92,157	3,006,041
Value of production	£ 168,092	496,214	68,511	231,081	199,012	36,026	1,099,141

(ii) *Total for Australia, 1931-32 to 1935-36.* The development of this industry since 1931-32 is set out hereunder:—

CHEMICAL FERTILIZERS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	34	33	34	33	33
Number of employees	1,477	1,702	1,706	1,801	1,990
Average horse-power of engines used ..	7,788	8,638	8,595	9,048	10,282
Approx. value of land and buildings ..	£ 1,325,207	1,398,489	1,446,410	1,365,737	1,378,630
Approx. value of plant and machinery ..	£ 2,309,658	2,199,257	2,095,142	2,120,628	2,127,113
Wages paid	£ 327,996	377,116	364,726	386,277	442,052
Value of fuel used	£ 76,486	88,949	86,137	84,028	88,670
Value of materials used	£ 2,143,640	2,849,768	2,452,106	2,370,798	2,726,551
Total value of output	£ 3,152,111	4,028,984	3,577,732	3,440,860	3,906,041
Value of production	£ 931,985	1,090,267	1,039,489	986,034	1,090,814

5. *Agricultural Implement Works.*—(i) *General.* The manufacture of agricultural implements is of particular interest, owing to the extensive agricultural activities and to the fact that it was one of the first to which it was sought to apply the so-called "New Protection." The articles manufactured include stripper-harvesters, header harvesters or reaper threshers, strippers, reapers and binders, stump-jump and other ploughs, harrows, disc and other cultivators, winnowers, corn-shellers and baggers, drills, kerosene and petrol engines, and other implements employed in agriculture. The stripper harvester, which combines the stripper with a mechanism for winnowing and bagging grain, is an Australian invention, and is universally employed in the larger wheat-growing areas.

(ii) *Details for States, 1935-36.* The following table gives details respecting agricultural implement works in each State for the year 1935-36:—

AGRICULTURAL IMPLEMENT WORKS, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	23	70	5	35	8	2	143
Number of employees	919	2,828	308	828	76	4	5,053
Average horse-power of engines used ..	874	3,590	364	1,230	(a)	(a)	6,142
Approx. value of land and buildings ..	£ 110,608	290,084	27,644	141,211	(a)	(a)	608,679
Approx. value of plant and machinery ..	£ 76,280	290,819	48,833	181,435	(a)	(a)	600,915
Wages paid	£ 168,740	550,001	75,097	125,274	(a)	(a)	939,350
Value of fuel used	£ 8,376	44,272	4,945	8,655	(a)	(a)	66,518
Value of materials used	£ 212,607	944,920	108,427	152,484	(a)	(a)	1,121,478
Total value of output	£ 484,309	1,445,497	242,070	327,836	(a)	(a)	2,528,088
Value of production	£ 263,326	750,395	129,298	166,697	(a)	(a)	1,340,092

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(iii) *Total for Australia, 1931-32 to 1935-36.* This industry declined considerably during the war years, but great progress was made thereafter. The fall in world prices of agricultural products resulted, however, in a considerable slackening in employment and output during the three years ended 1931-32. Despite the continuance of the low prices the industry has made progress during the past four years. Details for each of the last five years are as follows:—

AGRICULTURAL IMPLEMENT WORKS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	139	142	139	139	143
Number of employees	2,634	3,770	3,944	4,202	5,053
Average horse-power of engines used ..	4,094	4,792	5,257	5,815	6,142
Approx. value of land and buildings ..	£ 632,071	614,210	667,370	587,002	608,679
Approx. value of plant and machinery ..	£ 571,277	552,299	562,399	502,345	600,915
Wages paid	£ 441,102	626,214	671,861	730,906	939,350
Value of fuel used	£ 38,781	53,234	53,365	80,091	66,518
Value of materials used	£ 506,074	779,959	709,107	853,751	1,121,478
Total value of output	£ 1,146,849	1,609,523	1,766,707	1,968,593	2,528,088
Value of production	£ 601,994	866,330	914,145	1,033,838	1,340,092

6. **Engineering Works.**—Formerly, it was impossible to show separate details for the engineering industry owing to the different classifications among the States, but since 1926-27 substantial uniformity has been attained, and with one or two duplications of minor importance, the following figures may be accepted as reasonably accurate for the engineering industry, excluding the marine and electrical branches :—

ENGINEERING WORKS, (a) 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	297	380.	64	56	118	20	935
Number of employees ..	7,767	7,617	2,030	1,077	1,461	223	20,175
Average horse-power of engines used ..	12,130	9,788	2,883	1,547	2,043	383	28,774
Approximate value of land and buildings ..	£ 1,273,251	£ 1,191,848	£ 261,056	£ 127,854	£ 230,787	£ 42,814	£ 3,127,610
Approximate value of plant and machinery ..	£ 1,109,971	£ 1,099,968	£ 303,069	£ 135,187	£ 189,336	£ 33,101	£ 2,871,532
Wages paid ..	£ 1,561,212	£ 1,511,670	£ 418,713	£ 158,800	£ 302,831	£ 43,075	£ 4,029,121
Value of fuel used ..	£ 84,153	£ 78,236	£ 25,899	£ 11,381	£ 30,509	£ 5,149	£ 235,087
Value of materials used ..	£ 1,080,097	£ 2,171,218	£ 194,274	£ 114,753	£ 153,205	£ 34,670	£ 5,319,627
Total value of output ..	£ 4,144,714	£ 4,572,304	£ 1,121,207	£ 472,307	£ 1,002,599	£ 100,458	£ 11,713,669
Value of production ..	£ 2,379,862	£ 2,321,950	£ 601,032	£ 246,253	£ 518,225	£ 60,733	£ 6,128,055

(a) Excluding marine and electrical.

In addition to engineering works which supply ordinary requirements, many establishments manufacture special classes of machinery and implements. The manufacture of mining, smelting and textile machinery and apparatus forms an important section of this industry.

7. **Smelting, Converting, Refining and Rolling of Iron and Steel.**—The extension of the classification noted in the preceding paragraph has made possible the separate publication of details for the group of industries comprised herein. This grouping includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights, steel window frames and sashes, nuts and bolts, springs, horse-shoes, screws, lifts, tools, brickmakers' implements and oxy-acetylene welding. Particulars for the year 1935-36 are as follows :—

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	171	200	32	31	..	..	434
Number of employees ..	10,687	5,151	479	1,347	..	..	17,664
Average horse-power of engines used ..	99,553	10,943	669	1,839	..	..	113,004
Approximate value of land and buildings ..	£ 2,215,042	£ 616,476	£ 47,941	£ 112,325	..	..	£ 2,991,784
Approximate value of plant and machinery ..	£ 5,781,367	£ 583,359	£ 72,095	£ 72,131	..	..	£ 6,509,852
Wages paid ..	£ 2,595,834	£ 900,607	£ 79,445	£ 189,881	..	..	£ 3,705,767
Value of fuel used ..	£ 1,649,902	£ 129,163	£ 11,908	£ 19,359	..	..	£ 1,810,332
Value of materials used ..	£ 2,550,673	£ 1,209,304	£ 103,324	£ 260,255	..	..	£ 4,123,556
Total value of output ..	£ 19,482,278	£ 2,807,356	£ 229,089	£ 557,079	..	..	£ 23,075,802
Value of production ..	£ 5,272,703	£ 1,468,889	£ 113,857	£ 277,465	..	..	£ 7,132,914

8. **Extracting and Refining of Non-ferrous Metals and Alloys.**—The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The classification of these works is not uniform throughout the

States, and the tabulation is somewhat unsatisfactory. The returns do not include particulars of plants used on mines :—

EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories	10	6	13	2	..	3	34
Number of employees	927	44	389	1,094	..	1,187	3,641
Average horse-power of engines used ..	10,565	56	2,781	(b)	..	(b)	68,083
Approx. value of land and buildings £	200,848	15,567	263,291	(b)	..	(b)	931,800
Approx. value of plant and machinery £	624,208	4,219	594,531	(b)	..	(b)	2,685,561
Wages paid	£ 252,910	7,605	107,032	(b)	..	(b)	995,058
Value of fuel used	£ 171,760	1,175	86,520	(b)	..	(b)	799,141
Value of materials used	£ 5,377,915	129,198	706,383	(b)	..	(b)	11,073,145
Total value of output	£ 7,146,803	100,906	1,291,209	(b)	..	(b)	15,309,623
Value of production	£ 1,594,110	39,533	497,806	(b)	..	(b)	3,446,337

(a) In Western Australia all the plants are worked on the mines, and are therefore not included
(b) Information not available for publication. (c) Including South Australia and Tasmania.

9. Railway and Tramway Workshops.—(i) *Details for each State, 1935-36.* The railway and tramway workshops which form an important item in Class IV. are chiefly State-owned institutions. The following table giving details concerning them includes, in addition, municipal establishments for manufacturing and repairing rolling-stock. Private institutions to the number of 7 in 1935-36 have, however, been excluded :—

TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC., (a) 1935-36

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories	37	25	12	76	20	5	115
Number of employees	11,708	5,386	3,506	2,771	1,973	334	25,078
Average horse-power of engines used	13,592	12,390	3,306	3,866	4,234	304	37,752
Approximate value of land and buildings	£ 2,946,771	1,563,372	556,143	881,833	474,316	14,000	6,436,465
Approximate value of plant and machinery	£ 2,348,727	1,118,651	365,348	727,868	384,189	96,580	5,041,603
Wages paid	£ 2,499,647	1,189,217	828,570	580,483	403,763	75,030	5,585,710
Value of fuel used	£ 102,067	63,103	23,036	26,020	17,192	5,142	236,500
Value of materials used	£ 1,989,193	1,220,991	541,628	453,993	220,000	19,008	4,444,903
Total value of output	£ 5,051,520	2,763,458	1,570,540	1,176,446	785,590	108,055	11,455,618
Value of production	£ 2,960,269	1,479,304	1,005,876	600,433	548,398	83,815	6,774,155

(a) Government and Municipal only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling-stock, etc., no new goods being manufactured. Particulars in regard to this establishment are not included in any of the tables in this chapter.

(ii) *Total for Australia, 1931-32 to 1935-36.* The following table shows the development of railway and tramway workshops in Australia since 1931-32 :—

TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC., (a) — AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	108	107	109	111	115
Number of employees	24,017	23,069	23,911	24,487	25,678
Average horse-power of engines used ..	34,050	29,832	30,171	30,128	37,752
Approx. value of land and buildings £	6,027,378	6,259,362	6,294,948	6,411,562	6,436,165
Approx. value of plant and machinery £	4,949,147	5,021,031	5,038,157	5,012,877	5,011,603
Wages paid	£ 5,095,173	4,801,944	4,835,444	5,166,904	5,585,710
Value of fuel used	£ 218,795	222,432	226,143	222,611	236,500
Value of materials used	£ 3,476,207	3,733,160	3,795,359	4,052,214	4,444,903
Total value of output	£ 9,782,841	9,778,238	9,906,428	10,248,401	11,455,618
Value of production	£ 6,087,839	5,822,646	5,884,926	5,973,576	6,774,155

(a) Government and Municipal only.

The growth of the railway and tramway systems resulted in corresponding activity in workshops engaged in the manufacture or repair of rolling-stock, etc. The economic depression practically restricted the industry to repair work during recent years, but there was considerable expansion in 1935-36.

10. Motor Vehicles and Cycles. —The industries catering for the motor trade are included in Class IV.—Industrial Metals, Machines, Implements and Conveyances. Returns in regard to assembling and repairing are shown hereunder for the year 1935-36 :—

ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,072	936	109	139	282	95	2,723
Number of employees ..	6,321	6,057	1,538	1,273	1,198	549	16,936
Average horse-power of engines used ..	4,458	3,534	896	753	817	326	10,784
Approximate value of land and buildings ..	£ 2,113,173	£ 1,476,356	£ 443,422	£ 305,530	£ 352,942	£ 210,211	£ 4,901,634
Approximate value of plant and machinery ..	£ 457,316	£ 347,093	£ 83,653	£ 82,244	£ 90,822	£ 39,619	£ 1,091,747
Wages paid ..	£ 994,099	£ 973,100	£ 264,943	£ 177,597	£ 207,537	£ 73,731	£ 2,691,007
Value of fuel used ..	£ 50,486	£ 51,524	£ 11,985	£ 8,549	£ 11,113	£ 5,451	£ 139,108
Value of materials used ..	£ 1,114,533	£ 228,056	£ 14,021	£ 175,577	£ 234,326	£ 73,005	£ 1,839,518
Total value of output ..	£ 2,845,541	£ 1,714,187	£ 587,755	£ 450,595	£ 670,530	£ 194,244	£ 6,462,852
Value of production ..	£ 1,680,522	£ 1,434,607	£ 501,749	£ 266,469	£ 425,091	£ 115,788	£ 4,484,226

Particulars in regard to motor body building for the year 1935-36 are as follows :—

MOTOR BODY BUILDING, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	48	73	25	12	22	..	180
Number of employees ..	1,234	3,671	370	6,474	256	..	12,005
Average horse-power of engines used ..	666	1,941	222	3,652	160	..	6,041
Approximate value of land and buildings ..	£ 201,208	£ 501,700	£ 57,232	£ 349,502	£ 60,502	..	£ 1,170,144
Approximate value of plant and machinery ..	£ 27,914	£ 191,811	£ 9,088	£ 128,119	£ 11,316	..	£ 371,877
Wages paid ..	£ 218,679	£ 735,410	£ 63,702	£ 1,215,049	£ 43,919	..	£ 2,276,768
Value of fuel used ..	£ 4,367	£ 16,561	£ 1,358	£ 42,380	£ 1,371	..	£ 66,043
Value of materials used ..	£ 246,859	£ 1,042,329	£ 73,418	£ 1,931,097	£ 56,397	..	£ 3,350,095
Total value of output ..	£ 545,807	£ 2,106,803	£ 172,253	£ 4,001,378	£ 124,534	..	£ 7,040,77
Value of production ..	£ 294,581	£ 1,047,913	£ 97,477	£ 2,117,900	£ 66,766	..	£ 3,624,037

The output of motor bodies for Australia is shown in the next table :—

MOTOR BODIES PRODUCED IN AUSTRALIA.

Items.	1929-30. (a)	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Motor Bodies—						
Number ..	46,409	6,323	13,532	26,302	45,445	67,337
Value ..	£ 3,118,987	£ 450,510	£ 1,100,504	£ 2,112,439	£ 4,180,586	£ 6,043,735

(a) Excluding Queensland.

The maximum number of motor bodies manufactured in Australia was 88,876 recorded in 1926-27.

11. Electrical Installations, Cables and Apparatus.—(i) *Details for each State, 1935-36.* The following table shows particulars of this industry for each State during the year 1935-36:—

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	108	119	13	23	26	5	294
Number of employees ..	4,791	2,657	135	418	111	25	8,137
Average horse-power of engines used ..	4,970	1,706	64	373	112	11	7,236
Approx. value of land and buildings ..	£ 732,278	£ 353,870	£ 34,396	£ 64,336	£ 54,147	£ 6,850	£ 1,245,877
Approx. value of plant and machinery ..	£ 443,524	£ 179,484	£ 6,460	£ 28,741	£ 10,385	£ 901	£ 660,504
Wages paid ..	£ 820,412	£ 396,137	£ 28,077	£ 59,480	£ 18,222	£ 3,388	£ 1,325,736
Value of fuel used ..	£ 17,847	£ 19,221	£ 502	£ 1,177	£ 1,117	£ 228	£ 73,780
Value of materials used ..	£ 1,268,560	£ 595,625	£ 31,311	£ 138,426	£ 22,267	£ 3,313	£ 2,059,502
Total value of output ..	£ 2,635,235	£ 1,309,047	£ 68,771	£ 245,258	£ 60,829	£ 10,010	£ 4,329,150
Value of production ..	£ 1,319,128	£ 694,181	£ 36,898	£ 102,104	£ 37,086	£ 6,471	£ 2,195,868

(ii) *Total for Australia, 1931-32 to 1935-36.* The increased output of electrical energy in Australia during the past five years, referred to in par. 36 below, necessitated a corresponding demand for electrical equipment. As imports declined heavily during the depression years the local industry was called upon to furnish the bulk of the new supplies, and the result of its operations has been a remarkable development in the manufacture of electrical goods in Australia.

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	248	246	275	280	294
Number of employees ..	4,356	5,005	5,774	7,098	8,137
Average horse-power of engines used ..	4,540	6,208	6,604	6,620	7,236
Approx. value of land and buildings ..	£ 1,082,892	£ 1,063,843	£ 1,122,331	£ 1,168,474	£ 1,245,877
Approx. value of plant and machinery ..	£ 610,023	£ 677,566	£ 666,988	£ 659,005	£ 660,504
Wages paid ..	£ 701,213	£ 847,830	£ 931,727	£ 1,130,683	£ 1,325,736
Value of fuel used ..	£ 49,083	£ 54,621	£ 63,881	£ 67,565	£ 73,780
Value of materials used ..	£ 1,057,189	£ 1,145,850	£ 1,383,137	£ 1,716,974	£ 2,059,502
Total value of output ..	£ 2,332,130	£ 2,562,034	£ 3,131,080	£ 3,822,333	£ 4,329,150
Value of production ..	£ 1,225,858	£ 1,361,563	£ 1,684,062	£ 2,037,794	£ 2,195,868

12. Wireless Apparatus.—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31, however, a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined, almost entirely, to the States of New South Wales and Victoria. The number of broadcast listeners' licences has increased from 331,128 in 1930-31 to 938,297 in 1936-37, and this increase is reflected in the advancement of the industry during that period:—

WIRELESS APPARATUS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	35	46	57	56	67
Number of employees ..	1,677	2,263	2,625	3,366	3,943
Average horse-power of engines used ..	396	467	498	890	1,336
Approx. value of land and buildings ..	£ 204,349	£ 218,931	£ 238,040	£ 292,594	£ 378,103
Approx. value of plant and machinery ..	£ 88,627	£ 95,534	£ 97,587	£ 135,208	£ 185,626
Wages paid ..	£ 200,759	£ 271,710	£ 295,792	£ 400,786	£ 493,314
Value of fuel used ..	£ 7,697	£ 9,230	£ 10,969	£ 12,503	£ 17,670
Value of materials used ..	£ 637,268	£ 829,452	£ 958,400	£ 1,172,067	£ 1,398,137
Total value of output ..	£ 1,023,916	£ 1,357,822	£ 1,589,093	£ 1,859,057	£ 2,243,150
Value of production ..	£ 378,951	£ 519,140	£ 619,724	£ 673,881	£ 827,352

13. **Woollen and Tweed Mills.**—(i) *Details for each State, 1935-36.* The manufacture of woollens and tweeds was established at an early period in Australian history and was under Government control, the first record in New South Wales dating back to 1801, when a few blankets were made by convicts, while manufacture in Victoria dates from 1867. The following table gives particulars for the year 1935-36 :—

WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1935-36.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust. (b)	W.A.	Tas.	Australia.
Number of factories	20	50	3	9	6	6	94
Number of employees	6,494	10,085	472	890	209	1,534	19,693
Average horse-power of engines used	9,233	18,927	739	2,447	675	2,715	34,736
Approx. value of land and buildings £	712,624	1,312,840	35,954	102,994	52,141	238,888	2,455,141
Approx. value of plant and machinery £	1,008,659	1,711,725	83,904	178,586	95,849	265,245	3,343,968
Wages paid £	847,160	1,351,049	56,212	116,219	33,383	208,700	2,612,723
Value of fuel used £	120,894	193,953	6,001	20,558	8,652	44,617	393,775
Value of materials used £	2,599,140	3,554,744	68,841	641,561	255,804	428,032	7,548,122
Total value of output £	4,343,383	5,936,927	167,298	836,133	332,688	928,638	12,545,067
Value of production £	1,623,349	2,189,130	92,456	174,014	68,232	455,989	4,603,170

(a) Woolscouring not included.

(b) Includes Fellmongery.

(ii) *Total for Australia, 1931-32 to 1935-36.* The extent of the woollen and tweed milling industry in Australia during the last five years is shown in the following table :—

WOOLLEN AND TWEED MILLS (INCLUDING WOOLSCOURING).—AUSTRALIA.

Items.	1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)
Number of factories	81	89	98	103	94
Number of employees	13,607	16,206	17,546	17,486	19,693
Average horse-power of engines used	30,298	31,586	31,423	31,919	34,736
Approx. value of land and buildings	£ 2,232,015	2,273,954	2,359,997	2,335,913	2,455,141
Approx. value of plant and machinery	£ 3,381,308	3,354,724	3,306,464	3,239,780	3,343,968
Wages paid	£ 1,945,879	2,196,162	2,233,024	2,234,513	2,612,723
Value of fuel used	£ 322,534	426,331	398,192	380,134	393,775
Value of materials used	£ 4,893,757	6,084,038	7,401,246	6,504,841	7,548,122
Total value of output	£ 8,452,029	10,307,925	11,635,920	10,712,076	12,545,067
Value of production	£ 3,235,740	3,796,956	3,836,482	3,827,101	4,603,170

(a) Excluding Woolscouring in New South Wales.

(iii) *Quantity and Value of Production.* The production consists chiefly of tweed cloths, flannels, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. Detailed particulars for the several States are not available for publication. The total length of tweed and cloth manufactured in Australia in 1935-36 was 24,435,598 square yards. In New South Wales 8,299,745 square yards, and in Victoria 14,571,067 square yards of tweed and cloth were manufactured. The production of flannel amounted to 8,265,212 yards, while blankets, shawls and rugs to the number of 1,447,241 were made. The output of yarn reported was 12,608,341 lb., most of which was produced in Victoria and New South Wales.

Cotton ginning has been carried on intermittently in the Northern States, and the recent development in cotton growing has led to the establishment of modern ginning plants at convenient centres in Queensland. In New South Wales the first establishment for the manufacture of cotton goods was erected in 1923-24. There were thirty-two establishments treating cotton in Australia in 1935-36, and these employed 2,038 hands, while the value of the output was £1,900,561.

14. **Hosiery and Other Knitted Goods.**—(i) *Details for each State, 1935-36.* In addition to the woollen and tweed factories, there were 314 hosiery and knitting mills operating in Australia during the year 1935-36. The total number of hands employed

by these establishments was 15,692, of which 11,115 were females. Details for each State are shown hereunder :—

HOSIERY AND OTHER KNITTED GOODS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	76	225	1	6	3	3	314
Number of employees	4,688	10,650	96	75	98	85	15,692
Average horse-power of engines used	2,086	4,181	(a)	23	39	(a)	b 6,398
Approx. value of land and buildings	610,721	1,138,108	(a)	12,225	8,113	(a)	b1,791,583
Approx. value of plant and machinery	£ 534,427	1,143,572	(a)	4,468	7,558	(a)	b1,711,536
Wages paid	£ 580,107	1,207,192	(a)	5,264	9,223	(a)	b1,810,265
Value of fuel used	£ 32,656	79,091	(a)	301	481	(a)	b 113,773
Value of materials used	£ 1,235,877	2,453,241	(a)	11,535	22,131	(a)	b3,768,336
Total value of output	£ 2,222,229	4,069,671	(a)	23,566	38,787	(a)	b7,327,363
Value of production	£ 953,696	2,437,339	(a)	11,730	16,175	(a)	b3,445,254

(a) Particulars not available for publication.

(b) Including Queensland and Tasmania.

(ii) *Total for Australia, 1931-32 to 1935-36.* Comparative statistics for the five years are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	290	312	320	310	314
Number of employees	12,479	13,884	13,950	14,492	15,692
Average horse-power of engines used	5,518	5,494	5,832	5,005	6,398
Approx. value of land and buildings	£ 1,543,664	1,708,066	1,668,748	1,676,897	1,791,583
Approx. value of plant and machinery	£ 1,560,616	1,603,813	1,620,528	1,654,979	1,711,536
Wages paid	£ 1,419,591	1,570,623	1,592,378	1,624,414	1,810,265
Value of fuel used	£ 92,197	101,822	100,680	107,812	113,773
Value of materials used	£ 3,051,741	3,321,222	3,420,858	3,506,656	3,768,336
Total value of output	£ 5,803,011	6,272,318	6,651,293	6,561,114	7,327,363
Value of production	£ 2,659,073	2,849,274	3,129,446	2,946,643	3,445,254

(iii) *Raw Material used and Production, 1935-36.* The main raw materials consumed in establishments manufacturing hosiery and knitted goods during the year 1935-36 consisted of woollen yarn, 6,208,006 lb.; cotton yarn, 5,243,807 lb.; silk, 833,753 lb.; and artificial silk, 5,241,966 lb. Production comprised 28,800,000 garments, valued at £3,758,972; 1,663,296 dozen pairs of stockings, valued at £2,114,779; and 1,532,884 dozen pairs of socks valued at £955,201.

15. *Tanning, Currying and Leather Dressing.*—(i) *Details for each State, 1935-36.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

TANNING, CURRYING AND LEATHER DRESSING, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas. (a)	Australia.
Number of factories	62	43	15	7	6	2	135
Number of employees	1,499	2,113	341	67	95	16	4,433
Average horse-power of engines used	3,380	4,612	1,019	123	(b)	(b)	e 9,540
Approx. value of land and buildings	£ 246,459	408,178	34,099	17,203	(b)	(b)	e 748,897
Approx. value of plant and machinery	£ 193,217	250,430	29,340	10,644	(b)	(b)	e 513,872
Wages paid	£ 285,788	435,272	59,831	11,152	(b)	(b)	e 810,742
Value of fuel used	£ 30,219	45,858	5,936	664	(b)	(b)	e 84,682
Value of materials used	£ 1,210,878	1,523,812	250,156	26,643	(b)	(b)	e 3,009,072
Total value of output	£ 1,708,140	2,340,531	300,009	39,651	(b)	(b)	e 4,387,662
Value of production	£ 518,043	776,861	104,877	12,342	(b)	(b)	e1,448,307

(a) Includes Fellmongery.
Western Australia and Tasmania.

(b) Particulars not available for publication.

(c) Including

(ii) *Total for Australia, 1931-32 to 1935-36.* The development of the tanning industry during the years stated is shown in the following table :—

TANNING, CURRYING AND LEATHER DRESSING.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	146	147	153	143	135
Number of employees	3,336	3,766	4,039	4,142	4,433
Average horse-power of engines used ..	8,312	8,945	9,583	9,475	9,540
Approx. value of land and buildings £	763,950	776,532	766,014	774,393	748,897
Approx. value of plant and machinery £	519,579	506,920	504,314	506,190	513,872
Wages paid	609,305	652,574	650,870	723,711	810,742
Value of fuel used	74,653	81,116	81,615	82,244	84,682
Value of materials used	2,350,842	2,451,725	2,818,421	2,764,343	3,090,679
Total value of output	3,509,078	3,688,550	4,110,056	4,080,442	4,632,662
Value of production	£ 1,074,583	£ 1,153,709	£ 1,270,020	£ 1,233,855	£ 1,448,301

It should be noted that in order to conceal confidential information particulars of one fellmongering establishment have been included in the figures for Tasmania.

(iii) *Raw Material Used and Production, 1935-36.* The quantities of raw material used and leather produced in tanneries in each State are shown in the following table :—

TANNERIES.—RAW MATERIAL USED AND PRODUCTION, 1935-36.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides..	No.	559,350	843,996	133,490	23,176	56,468	606	1,607,186
Skins—								
Calf	"	577,998	621,562	176,443	1,585	321	100	1,378,009
Goat	"	540,831	594,468	(a)	(a)	(a)	..	(b) 1,149,063
Sheep	"	2,072,108	230,978	259,448	193,291	3,841	..	2,759,666
Marsupial	"	8,851	80,973	57,463	2,664	11,025	239	101,215
Reptile	"	"	(a)	..	..	..	..	(b) 18,443
Other	"	1,459,237	581,562	..	360	..	6,400	2,047,559
Bark used—								
Wattle	ton	9,949	9,331	1,872	402	272	11	20,937
Other	"	379	2,093	16	5	576	..	3,060
Tanning extract used	lb.	3,520,248	1,141,444	697,700	30,979	825,232	..	6,215,603
Leather made—								
Sole	"	10,974,248	13,425,826	2,399,017	286,577	1,713,662	25,020	28,824,348
Harness	"	724,313	431,140	467,547	87,663	152,377	..	1,863,040
Upholstery	sq. ft.	..	6,063,422	..	32,242	..	..	6,095,664
Patent and other	"	7,858,509	13,319,027	1,833,732	250,455	185,210	..	23,446,933
Waxed kip and other	lb.	199,274	47,148	41,372	92,357	18,776	..	398,927
Dressed from skins—								
Calf	sq. ft.	4,887,204	5,066,143	1,999,969	8,025	3,388	..	11,964,720
Goat	"	2,028,968	2,448,146	(a)	3,052	(a)	..	(b) 4,571,673
Sheep	"	11,295,404	3,162,764	(a)	1,353,037	(a)	..	616,416,875
Marsupial	"	(c) 10,963	284,594	291,956	2,605	(c) 11,000	..	..

(a) Not available for publication.

(b) Including particulars for States marked (a).

(c) Number.

16. *Boot Factories.*—(i) *Boot and Shoe Factories, 1935-36.* The boot and shoe industry holds an important place in regard to employment afforded and extent of output. The operations of these factories have been rather obscured in recent years by the inclusion of a large number of repair establishments in the returns, but this difficulty has been overcome by the collection of separate statistics for each industry, and in the following table the details relate to boot and shoe factories as distinct from those devoted to repairing and bespoke work :—

BOOT AND SHOE FACTORIES, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	94	164	20	15	12	3	308
Number of employees	5,137	9,347	946	575	363	74	10,442
Average horse-power of engines used ..	1,687	3,103	272	248	220	24	5,554
Approximate value of land and buildings ..	£ 426,068	£ 613,811	£ 61,740	£ 87,796	£ 44,257	£ 7,280	£ 1,240,952
Approximate value of plant and machinery ..	£ 234,803	£ 371,571	£ 91,704	£ 160,009	£ 25,871	£ 3,218	£ 759,180
Wages paid	£ 655,143	£ 1,226,636	£ 111,689	£ 62,857	£ 41,025	£ 9,262	£ 2,106,612
Value of fuel used	£ 15,306	£ 30,184	£ 2,009	£ 1,878	£ 993	£ 341	£ 50,711
Value of materials used	£ 1,254,647	£ 2,294,251	£ 172,676	£ 105,266	£ 81,250	£ 15,669	£ 3,023,759
Total value of output	£ 2,229,776	£ 4,186,709	£ 327,516	£ 186,983	£ 147,618	£ 28,347	£ 7,107,939
Value of production	£ 959,823	£ 1,862,364	£ 152,831	£ 79,839	£ 65,375	£ 12,337	£ 3,132,569

(ii) *Boot Repairing, including Bespoke Work.* The introduction of small power plants in repairing shops has brought this class of establishment within the meaning of a factory for statistical purposes. Shops using small power plants have spread rapidly throughout Australia, and in 1935-36 the number amounted to 1,275, in which 2,103 hands were employed. The sum of £116,832 was distributed in salaries and wages, and the output was valued at £667,217.

(iii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown in the following table:—

BOOT AND SHOE FACTORIES.—OUTPUT, 1935-36.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY ('000 OMITTED).								
Boots and shoes	pairs	5,205,095	7,900,791	653,182	541,255	360,060	53,740	14,714,123
Slippers	..	1,923,154	4,259,884	198,506	85,668	183,927	..	6,651,229
Uppers (a)	..	33,398	9,431	108,988	5,634	1,007	500	158,958
VALUE.								
Boots and shoes	£	2,010,768	3,444,214	303,876	177,411	124,016	28,073	6,088,358
Slippers	..	194,588	607,829	13,284	6,946	23,155	..	845,802
Uppers (a)	£	8,256	6,207	11,346	2,066	784	106	28,765

(a) Made for other than factory use.

17. *Tailoring and Slop Clothing Factories.*—(i) *Details for each State, 1935-36.* The importance of this industry in the several States is shown in the following table:—

TAILORING AND SLOP CLOTHING FACTORIES, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	408	414	110	114	86	25	1,157
Number of employees ..	10,590	8,541	2,554	1,739	1,033	420	24,877
Average horse-power of engines used ..	951	891	220	113	76	26	2,277
Approximate value of land and buildings ..	£ 1,323,419	850,304	232,510	236,762	169,081	73,000	2,885,076
Approximate value of plant and machinery ..	£ 137,262	131,862	22,080	16,909	12,102	6,218	327,333
Wages paid ..	£ 1,092,791	919,001	248,002	163,189	113,933	41,861	2,578,597
Value of fuel used ..	£ 21,257	23,013	5,730	4,695	2,830	1,031	58,556
Value of materials used ..	£ 1,847,070	2,142,988	447,494	183,587	155,431	49,440	4,826,010
Total value of output ..	£ 3,494,904	3,599,722	932,419	446,821	352,286	113,685	8,939,837
Value of production ..	£ 1,626,577	1,433,721	479,195	258,539	194,025	63,214	4,055,271

(ii) *Total for Australia, 1931-32 to 1935-36.* Details for the last five years are as follows:—

TAILORING AND SLOP CLOTHING FACTORIES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	1,006	1,019	1,040	1,115	1,157
Number of employees ..	17,470	18,681	20,951	23,579	24,877
Average horse-power of engines used ..	1,647	1,847	1,838	2,110	2,277
Approx. value of land and buildings ..	£ 2,654,382	2,493,180	2,516,492	2,776,968	2,885,076
Approx. value of plant and machinery ..	£ 256,976	257,416	273,000	316,908	327,333
Wages paid ..	£ 1,859,268	1,895,349	2,126,826	2,446,429	2,578,597
Value of fuel used ..	£ 47,798	48,831	51,887	56,557	58,556
Value of materials used ..	£ 3,258,800	3,635,773	4,112,707	4,573,477	4,826,010
Total value of output ..	£ 6,158,633	6,653,256	7,627,067	8,407,294	8,939,837
Value of production ..	£ 2,852,035	2,968,652	3,462,473	3,776,960	4,055,271

18. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1935-36.* Particulars of dressmaking and millinery establishments are given separately in the following tables:—

DRESSMAKING ESTABLISHMENTS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	107	473	30	51	46	9	716
Number of employees ..	1,395	8,324	634	773	655	55	11,830
Average horse-power of engines used ..	100	836	49	62	52	4	1,103
Approximate value of land and buildings ..	£ 217,001	1,122,580	49,440	64,771	74,752	5,320	1,533,864
Approximate value of plant and machinery ..	£ 12,630	96,667	8,565	9,351	6,639	569	134,421
Wages paid ..	£ 119,601	767,730	51,203	55,791	50,833	3,395	1,048,553
Value of fuel used ..	£ 1,866	15,095	989	1,321	1,061	87	21,319
Value of materials used ..	£ 121,373	1,059,277	91,454	62,978	64,626	2,568	2,002,276
Total value of output ..	£ 304,113	2,928,058	178,830	146,701	144,696	8,265	3,710,663
Value of production ..	£ 180,874	1,252,786	86,387	82,402	79,009	5,610	1,687,066

(a) Includes Millinery.

MILLINERY ESTABLISHMENTS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	55	65	11	8	8	..	117
Number of employees ..	1,472	1,530	440	324	81	..	3,847
Average horse-power of engines used ..	60	180	43	25	12	..	350
Approximate value of land and buildings ..	£ 161,291	146,780	28,447	19,280	8,241	..	364,039
Approximate value of plant and machinery ..	£ 14,047	23,292	5,572	2,385	617	..	46,513
Wages paid ..	£ 133,462	146,264	33,206	22,136	7,727	..	342,795
Value of fuel used ..	£ 3,590	3,775	453	931	177	..	8,926
Value of materials used ..	£ 249,800	219,002	43,440	32,654	12,247	..	556,843
Total value of output ..	£ 499,683	463,341	95,385	75,530	24,709	..	1,158,648
Value of production ..	£ 240,593	240,564	51,492	41,945	12,285	..	592,879

(a) Included in Dressmaking.

(ii) *Total for Australia, 1931-32 to 1935-36.* Particulars of dressmaking and millinery establishments in Australia for the last five years are shown in the following table:—

DRESSMAKING AND MILLINERY ESTABLISHMENTS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35	1935-36.
Number of factories ..	..	731	764	812	863
Number of employees ..	..	11,347	13,455	14,212	15,166
Average horse-power of engines used ..	..	1,049	1,139	1,106	1,356
Approx. value of land and buildings ..	£ 1,667,555	1,710,482	1,795,265	1,898,295	1,897,903
Approx. value of plant and machinery ..	£ 163,200	171,217	176,845	177,241	180,934
Wages paid ..	£ 1,045,554	1,187,875	1,237,581	1,316,645	1,391,348
Value of fuel used ..	£ 22,508	24,717	27,205	28,225	30,245
Value of materials used ..	£ 2,061,912	2,354,141	2,327,141	2,430,034	2,559,119
Total value of output ..	£ 3,770,217	4,238,509	4,298,999	4,534,059	4,869,311
Value of production ..	£ 1,685,797	1,859,651	1,944,653	2,066,800	2,279,047

19. Shirts, Collars and Underclothing.—(i) *Details for each State, 1935-36.* Particulars of this industry are shown in the subjoined table:—

SHIRTS, COLLARS AND UNDERCLOTHING, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas. (c)	Australia.
Number of factories	117	129	16	31	14	1	308
Number of employees	4,247	4,890	993	504	517	3	11,214
Average horse-power of engines used	607	941	126	102	(a)	(a)	b 1,850
Approx. value of land and buildings	£ 286,986	434,938	49,525	42,870	(a)	(a)	b 842,896
Approx. value of plant and machinery	£ 75,864	145,388	11,180	11,168	(a)	(a)	b 253,736
Wages paid	£ 355,301	485,737	76,475	39,255	(a)	(a)	b1,001,615
Value of fuel used	£ 6,886	12,407	1,465	1,334	(a)	(a)	b 22,844
Value of materials used	£ 1,066,751	1,328,928	210,136	49,024	(a)	(a)	b2,708,887
Total value of output	£ 1,602,171	2,164,489	318,479	115,740	(a)	(a)	b4,311,566
Value of production	£ 528,534	823,154	106,878	65,382	(a)	(a)	b1,579,835

(a) Particulars not available for publication.
(c) Includes Handkerchiefs, Ties and Scarves.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1931-32 to 1935-36.* The following table shows the progress of the industry since 1931-32:—

SHIRTS, COLLARS AND UNDERCLOTHING.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	293	294	307	314	308
Number of employees	8,931	9,608	10,444	10,925	11,214
Average horse-power of engines used	2,341	1,731	1,779	1,880	1,850
Approx. value of land and buildings	£ 968,135	810,630	836,669	872,923	842,896
Approx. value of plant and machinery	£ 323,000	214,790	224,827	235,546	253,736
Wages paid	£ 831,850	822,985	850,459	929,192	1,001,615
Value of fuel used	£ 24,072	21,430	22,812	22,947	22,844
Value of materials used	£ 2,160,265	2,278,086	2,506,226	2,663,527	2,708,887
Total value of output	£ 3,538,921	3,623,179	3,870,571	4,174,304	4,311,566
Value of production	£ 1,354,584	1,323,663	1,350,533	1,487,835	1,579,835

20. Bacon-curing Factories.—(i) *Details for each State, 1935-36.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1935-36:—

BACON-CURING FACTORIES, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	23	21	9	8	10	7	78
Number of employees	393	546	705	233	82	49	2,008
Average horse-power of engines used	1,308	3,105	1,626	498	415	206	7,158
Approximate value of land and buildings	£ 136,446	230,672	221,599	85,461	28,808	16,573	719,559
Approximate value of plant and machinery	£ 56,025	123,048	117,927	25,361	13,103	7,970	343,434
Wages paid	£ 89,880	114,890	153,035	48,348	18,764	7,960	432,886
Value of fuel used	£ 13,727	21,152	26,076	5,969	3,352	2,976	73,252
Value of materials used	£ 789,186	741,335	1,125,111	306,924	188,024	49,508	3,200,088
Total value of output	£ 1,029,051	953,305	1,446,004	397,185	242,974	72,628	4,141,147
Value of production	£ 226,138	190,818	294,817	84,292	51,598	20,144	867,807

(ii) *Quantity and Value of Production.* The number of pigs killed and the quantity and value of the production of bacon-curing factories in each State for the year 1935-36 are given hereafter :—

BACON-CURING FACTORIES.—PIGS KILLED, AND PRODUCTION, 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PIGS KILLED.							
Number	251,647	198,148	384,027	75,739	62,527	18,643	990,731
PRODUCTS.							
Bacon and ham .. '000 lb.	21,156	17,099	23,017	6,274	5,316	1,417	74,279
Lard	863	830	1,303	213	275	85	3,569
VALUE.							
Bacon and ham .. £	783,819	715,774	889,112	252,209	193,412	52,578	2,886,904
Lard £	17,950	22,147	32,666	6,040	6,848	2,487	88,138
Other products .. £	124,728	136,714	526,140	138,936	20,419	16,793	963,640

Bacon and ham and other pig products are dealt with more fully in Chapter XXI.—Farmyard, Dairy and Bee Products.

21. *Butter, Cheese and Condensed Milk Factories.*—(i) *Details for each State, 1935-36.* The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1935-36 :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	130	176	98	42	24	47	517
Number of employees	1,425	2,680	1,096	413	215	233	6,002
Average horse-power of engines used	14,327	9,086	8,560	1,360	1,015	732	32,080
Approximate value of land and buildings £	641,615	1,080,580	576,035	162,435	86,942	88,256	2,635,863
Approximate value of plant and machinery £	770,428	1,082,783	717,340	122,307	85,580	71,117	2,849,645
Wages paid £	327,317	551,217	243,011	70,043	42,233	32,077	1,265,898
Value of fuel used £	84,915	131,545	52,608	16,244	10,518	14,430	310,260
Value of materials used £	6,162,192	8,653,908	5,727,640	1,044,395	653,085	386,228	22,627,448
Total value of output £	6,835,470	10,251,289	6,229,006	1,264,412	801,237	487,675	25,869,080
Value of production £	588,363	1,465,836	448,758	203,773	137,634	87,017	2,931,381

(ii) *Total for Australia, 1931-32 to 1935-36.* The progress of this industry during the last five years is set out hereunder :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	513	520	531	544	517
Number of employees	5,488	5,793	5,667	6,151	6,002
Average horse-power of engines used	29,131	29,028	29,911	32,815	32,080
Approx. value of land and buildings £	2,545,245	2,533,470	2,577,138	2,610,769	2,635,863
Approx. value of plant and machinery £	2,715,729	2,749,218	2,775,355	2,779,168	2,849,645
Wages paid £	1,202,209	1,173,007	1,202,397	1,251,118	1,265,898
Value of fuel used £	303,547	311,254	311,261	320,073	310,260
Value of materials used £	19,920,816	17,996,224	17,387,074	20,182,321	22,627,148
Total value of output £	22,743,620	21,033,968	20,809,678	23,376,685	25,869,089
Value of production £	2,519,257	2,728,490	3,110,443	2,874,291	2,931,381

(iii) *Quantity and Value of Production.* The next table shows the quantity and value of butter, cheese and condensed milk produced, and the quantity of milk used in butter, cheese and condensed milk factories in each State for the year 1935-36:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES.—PRODUCTION, 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MILK USED (,000 OMITTED).							
Butter factories .. als	240,000	309,822	229,067	31,975	23,043	19,602	853,500
Cheese factories	7,265	10,974	9,006	7,736	810	2,131	37,922
Condensed milk factories ..	3,858	10,523	(a)	(a)	(a)	..	(b) 15,395

PRODUCTS (,000 OMITTED).									
Butter ..	..	lb.	119,123	143,161	112,500	17,017	10,968	8,017	410,780
Cheese ..	..	..	7,060	10,798	9,149	8,103	863	2,110	38,083
Condensed and concentrated milk ..	..	lb.	9,529	23,768	(a)	(a)	(a)	..	(b) 37,152
Powdered milk ..	..	..	..	10,617	..	..	..	..	10,617

VALUE (,000 OMITTED).									
Butter ..	..	£	6,184	7,437	5,838	940	698	404	21,501
Cheese ..	..	£	292	362	270	250	35	64	1,273
Condensed and concentrated milk ..	..	£	266	492	(a)	(a)	(a)	..	(b) 845
Powdered milk ..	..	£	..	206	..	..	..	..	290

(a) Information not available for publication.

(b) Includes States marked (a).

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXI.—Farmyard, Dairy and Bee Products.

22. *Meat and Fish Preserving Works.*—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling frozen beef, lamb and mutton for export, while insulated space for the carriage of frozen produce is provided by steamship companies trading between Australia and other parts of the world. The substitution of the export of chilled for frozen meat has already been referred to in Chapter XIX.—Pastoral Production.

MEAT AND FISH PRESERVING WORKS, (a) 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	6	25	11	..	3	..	45
Number of employees ..	204	1,657	2,049	..	125	..	4,035
Average horse-power of engines used ..	301	6,074	5,712	..	1,240	..	13,327
Approximate value of land and buildings ..	£ 39,360	728,656	1,216,593	..	378,679	..	2,363,288
Approximate value of plant and machinery ..	£ 18,383	392,919	658,896	..	394,863	..	1,465,061
Wages paid ..	£ 34,887	344,884	604,583	..	59,837	..	1,044,191
Value of fuel used ..	£ 5,083	56,398	79,893	..	9,271	..	150,645
Value of materials used ..	£ 111,677	4,737,633	3,222,980	..	182,549	..	8,254,839
Total value of output ..	£ 152,341	5,677,850	1,108,976	..	265,757	..	10,209,924
Value of production ..	£ 40,581	883,819	806,103	..	73,937	..	1,804,440

(a) Including meat extracts.

Particulars regarding the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XIX.—Pastoral Production.

23. Bakeries.—Information regarding establishments in which the manufacture of bread, cakes, etc., was earned on in the year 1935-36 is given in the table below. It should be noted, however, that, as explained in § 1, par. 2 above the details refer to establishments coming within the definition of a factory. For that reason there are a large number of bakehouses omitted and consequently the table does not give complete details of the industry. This is true of all other industries covered by the statistics of manufacturing production but, in view of the omission of such a large number of establishments in this instance, special mention of this fact is deemed desirable.

BAKERIES (INCLUDING CAKES AND PASTRY), 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	317	537	205	117	113	74	1,504
Number of employees ..	3,561	3,131	1,242	794	492	1,214	10,434
Average horse-power of engines used ..	3,209	2,138	931	733	321	836	8,168
Approximate value of land and buildings ..	£ 1,736,306	1,132,603	416,319	250,337	159,465	343,523	4,038,553
Approximate value of plant and machinery ..	£ 502,977	365,988	135,377	76,153	44,915	58,279	1,183,689
Wages paid ..	£ 632,074	461,593	180,542	114,121	74,240	154,228	1,616,798
Value of fuel used ..	£ 96,992	83,664	25,701	15,902	12,210	18,674	253,143
Value of materials used ..	£ 2,036,156	1,780,510	601,559	420,483	277,679	131,050	3,647,306
Total value of output ..	£ 2,331,242	2,344,777	1,122,108	600,157	421,724	200,043	3,155,920
Value of production ..	£ 1,228,452	978,053	404,908	231,872	191,840	230,292	3,265,417

(a) Includes Biscuits and Confectionery.

24. Jam and Fruit Preserving, Pickles, Sauces and Vinegar Factories.—(i) *Details for each State, 1935-36.* The subjoined table gives particulars of factories included in this class for the year 1935-36. One establishment engaged in meat preserving has been included in the details shown for Tasmania in order that confidential information may not be disclosed.

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	31	43	14	18	9	10	125
Number of employees ..	1,401	2,755	408	470	84	655	5,773
Average horse-power of engines used ..	1,680	2,397	219	373	48	1,278	5,995
Approximate value of land and buildings ..	£ 272,472	570,205	34,621	119,490	19,198	109,218	1,125,204
Approximate value of plant and machinery ..	£ 120,349	310,794	17,105	80,552	7,098	100,161	516,411
Wages paid ..	£ 231,235	445,054	56,130	63,421	10,934	123,018	929,792
Value of fuel used ..	£ 20,220	40,616	4,811	5,689	812	17,019	80,227
Value of materials used ..	£ 918,721	1,704,149	354,144	117,544	15,704	110,068	3,138,338
Total value of output ..	£ 1,760,780	2,917,503	194,103	173,507	22,707	982,088	3,150,111
Value of production ..	£ 827,809	1,013,747	103,179	121,633	36,214	118,965	2,221,547

(ii) *Total for Australia, 1931-32 to 1935-36.* Particulars in connexion with these establishments in Australia for the last five years are given hereunder:—

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	121	115	120	122	125
Number of employees ..	4,130	4,796	4,805	5,000	5,773
Average horse-power of engines used ..	5,711	5,730	5,493	5,812	5,995
Approx. value of land and buildings ..	£ 1,037,911	1,025,310	1,032,409	1,100,004	1,125,204
Approx. value of plant and machinery ..	£ 548,062	525,057	575,109	521,509	516,411
Wages paid ..	£ 617,912	709,572	722,265	795,621	929,792
Value of fuel used ..	£ 61,832	66,231	65,724	78,144	80,227
Value of materials used ..	£ 2,786,069	3,185,285	2,831,602	3,312,587	3,138,338
Total value of output ..	£ 4,210,988	4,919,037	4,634,959	5,420,370	3,150,111
Value of production ..	£ 1,363,487	1,667,521	1,737,633	2,038,475	2,221,547

The progress of the jam-making industry was very marked during the war years, when large quantities were exported overseas for the supply of army requirements. In the year 1918-19 the production amounted to 142,290,000 lb. but, with the termination of the war, the quantity declined to 90,140,000 lb. in 1920-21. During the succeeding years the production of jam varied considerably falling to 66,120,000 lb. in 1930-31 and subsequently improving to 90,302,000 lb. in 1935-36. In 1935-36 the output of preserved fruit reached the record figure of 116,697,000 lb., nearly 19 million lb. in excess of the previous year and more than 12 million lb. greater than the previous maximum in 1932-33. The production of pickles and sauces again showed a satisfactory improvement.

(iii) *Production.* The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1935-36:—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES.—OUTPUT, 1935-36.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).								
Jams and Jellies ..	lb.	18,942	35,543	8,004	7,282	625	19,006	90,302
Pulp ..	"	2,289	27,753	778	6,803	759	7,972	46,354
Fruit, preserved ..	"	25,035	70,705	10,010	5,839	40	5,008	116,697
Pickles ..	pints	1,501	1,704	422	1,309	(a)	(a)	(b) 5,143
Sauces ..	"	6,541	8,886	522	2,240	(a)	(a)	(b) 18,796

VALUE.

Jams and Jellies ..	£	571,130	697,531	139,470	120,887	13,504	440,554	1,989,130
Pulp ..	£	11,530	125,203	4,551	35,045	3,015	95,218	275,171
Fruit, preserved ..	£	502,691	1,096,264	251,028	94,603	625	125,079	2,020,290
Pickles ..	£	48,676	61,820	17,342	47,724	(a)	(a)	(b) 184,189
Sauces ..	£	305,197	256,513	17,803	66,930	(a)	(a)	(b) 662,733

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

25. *Confectionery Factories.*—(i) *Details for each State, 1935-36.* At the close of the year 1900 there were in New South Wales 16 establishments, with 700 employees, and in Victoria 16 establishments, employing 731 persons, the plant and machinery in the former State being valued at £2,815, and in the latter at £10,070. The figures for the year 1935-36 given hereunder show the remarkable development since 1900:—

SUGAR CONFECTIONERY FACTORIES, (b) 1935-36.

Items.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	..	66	100	15	18	14	4	217
Number of employees ..	..	3,320	3,050	501	371	261	7	7,516
Average horse-power of engines used ..	..	5,593	6,370	1,280	735	341	41	14,365
Approximate value of land and buildings ..	£	947,137	502,033	179,487	81,849	60,426	3,520	1,774,452
Approximate value of plant and machinery ..	£	942,321	548,318	88,045	60,496	69,457	3,526	1,712,163
Wages paid ..	£	452,023	120,870	91,839	31,075	34,217	1,151	1,010,775
Value of fuel used ..	£	50,078	44,664	8,227	9,273	4,427	372	117,041
Value of materials used ..	£	1,463,840	1,172,306	100,060	113,126	80,160	3,225	3,023,606
Total value of output ..	£	2,069,999	2,021,124	315,407	174,334	204,786	6,510	5,002,140
Value of production ..	£	1,396,082	804,064	146,290	51,855	120,199	2,919	2,521,409

(a) Ice Cream factories—Other Confectionery included in Bakeries, and Ice Cream.

(b) Including Chocolate

(ii) *Total for Australia, 1931-32 to 1935-36.* Particulars of the confectionery industry during the last five years are shown in the following table :—

SUGAR CONFECTIONERY FACTORIES.—AUSTRALIA.

Items.	1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)
Number of factories	223	221	214	218	217
Number of employees	6,270	6,375	6,698	7,158	7,516
Average horse-power of engines used	12,074	12,071	12,073	12,439	14,393
Approx. value of land and buildings	£ 1,797,490	£ 1,737,550	£ 1,694,606	£ 1,721,645	£ 1,774,452
Approx. value of plant and machinery	£ 1,882,742	£ 1,738,497	£ 1,686,517	£ 1,749,349	£ 1,712,163
Wages paid	£ 861,562	£ 857,003	£ 848,592	£ 935,244	£ 1,010,775
Value of fuel used	£ 111,789	£ 108,489	£ 112,681	£ 112,059	£ 117,041
Value of materials used	£ 2,276,592	£ 2,400,145	£ 2,518,756	£ 2,743,793	£ 3,023,696
Total value of output	£ 4,398,656	£ 4,473,075	£ 4,734,105	£ 5,120,164	£ 5,662,146
Value of production	£ 2,010,275	£ 1,955,441	£ 2,102,668	£ 2,264,342	£ 2,521,409

(a) See notes to previous table.

The confectionery industry expanded rapidly during the war years largely as a result of the stimulus afforded by the embargo placed on the importation of luxuries during that period. The industry, however, was seriously affected by the business depression but has now regained its former position. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production is sufficient to supply local requirements, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

26. Grain Milling.—(i) *Details for States, 1935-36.* The following table shows the position of the flour-milling industry in each State in 1935-36 :—

GRAIN MILLING, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories	53	38	10	35	20	9	168
Number of employees	1,299	1,113	352	419	389	113	3,685
Average horse-power of engines used	8,111	6,151	1,683	3,025	3,007	548	22,525
Approximate value of land and buildings	£ 794,766	£ 553,578	£ 193,592	£ 162,254	£ 231,140	£ 66,622	£ 2,001,952
Approximate value of plant and machinery	£ 741,293	£ 543,396	£ 191,198	£ 221,596	£ 221,118	£ 31,467	£ 1,923,168
Wages paid	£ 309,304	£ 246,078	£ 79,701	£ 81,867	£ 81,712	£ 24,246	£ 823,198
Value of fuel used	£ 82,076	£ 63,814	£ 14,166	£ 26,325	£ 21,002	£ 4,275	£ 213,152
Value of materials used	£ 1,480,690	£ 3,756,614	£ 899,450	£ 1,088,720	£ 1,088,856	£ 230,603	£ 11,546,032
Total value of output	£ 5,327,808	£ 4,411,601	£ 1,118,142	£ 1,275,652	£ 1,175,212	£ 285,817	£ 13,804,323
Value of production	£ 764,433	£ 591,263	£ 204,532	£ 160,605	£ 367,454	£ 44,849	£ 2,133,139

(a) The manufacture of corn flour, oatmeal, etc., was also carried on in some of these establishments.

(ii) *Production of Flour and By-products, 1931-32 to 1935-36.* The production of flour by the mills in each State for the years indicated was as follows :—

GRAIN MILLING.—PRODUCTION OF FLOUR.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)
1931-32 ..	490,662	396,257	77,376	153,115	131,165	19,540	1,270,215
1932-33 ..	525,651	425,930	91,498	129,225	127,574	19,372	1,319,250
1933-34 ..	495,779	395,566	84,159	121,811	122,000	19,253	1,238,568
1934-35 ..	555,173	437,262	86,246	136,716	124,130	19,260	1,358,787
1935-36 ..	523,281	435,340	86,142	124,021	118,340	20,492	1,307,616

(a) Tons of 2,000 lb.

The production of flour in Australia for the last year, 1,307,616 tons, was valued at £10,600,278. In addition, 570,059 tons of bran and pollard, valued at £3,064,788, were made. The quantity of wheat ground was 62,724,779 bushels.

27. Sugar Mills.—(i) *Details for 1935-36.* The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1935-36. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XX.—Agricultural Production.

SUGAR MILLS, 1935-36.

Items.	N.S.W.	Queensland.	Australia.
Number of factories	3	33	36
Number of employees	198	4,176	4,374
Average horse-power of engines used ..	2,970	40,218	43,188
Approximate value of land and buildings £	230,000	1,019,066	1,249,066
Approximate value of plant and machinery £	932,053	7,688,522	8,620,575
Wages paid	£ 76,073	1,146,178	1,222,251
Value of fuel used	£ 14,998	91,744	106,742
Value of materials used	£ 437,310	7,456,224	7,893,534
Total value of output	£ 663,975	9,699,025	10,363,000
Value of production	£ 211,667	2,151,057	2,362,724

The products of the sugar mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Part of the molasses produced is used for distillation, part is prepared for human consumption, part is turned into food cake for cattle, part is used for manuring land, and the balance is either burnt as fuel or is allowed to run to waste. This latter quantity, however, is being reduced each year.

(ii) *Progress of Industry.* (a) *New South Wales.* The following table shows the progress which has been made in this industry in New South Wales since 1911:—

SUGAR MILLS.—NEW SOUTH WALES.

Items.	1911.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	4	3	3	3	3
Number of employees	469	118	135	144	198
Cane crushed .. tons	147,799	156,818	230,918	227,424	280,472
Sugar produced	17,299	18,567	27,586	29,428	36,461
Molasses produced gals.	796,440	899,100	1,163,700	1,059,555	1,390,180

The concentration of cane-crushing in establishments fitted with modern machinery has caused the closing of the small home mill and thereby reduced the number of mills operating. The Government assistance, referred to in the chapter dealing with Agriculture, has resulted in considerable progress in the cultivation of sugar-cane and increased activity in milling. Particulars regarding cane crushed and sugar produced embodied in these tables refer to the quantities treated during the twelve months ending 30th June in each year, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced differ slightly from those given in Chapter XX.—Agriculture, which relate to harvest years.

(b) *Queensland.* Details for Queensland for 1911 and the last four years are given hereunder:—

SUGAR MILLS.—QUEENSLAND, 1911 TO 1935-36.

Items.	1911.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories ..	49	33	33	33	33
Number of employees ..	4,295	4,910	5,132	4,430	4,176
Cane crushed .. tons	1,534,451	3,546,373	4,667,122	4,271,380	4,220,435
Sugar produced .. "	173,290	512,781	638,559	611,161	610,080
Molasses—					
Sold to distillers and others .. gals.	2,393,669	2,904,242	4,448,494	5,017,717	4,792,950
Used as fodder ..	—	—	—	—	—
Used as manure ..	223,000	1,414,338	1,793,101	2,227,905	2,559,528
Burnt as fuel ..	1,047,333	6,182,709	7,348,015	5,339,489	4,103,475
In stock ..	1,197,626	898,524	634,022	1,673,607	..
Total molasses ..	6,451,192	15,791,261	18,873,185	18,457,031	16,488,386

28. *Sugar Refineries.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry. The first refinery was operated in 1861 at Brisbane. Since that time the number of refineries has increased, and there were two sugar refineries in each of the States of Victoria and Queensland, and one in each of the States of New South Wales, South Australia and Western Australia. The quantity of raw sugar treated amounted to 331,127 tons, for a yield of 323,843 tons of refined sugar, valued at £10,381,222.

29. *Breweries.*—(i) *Details for each State, 1935-36.* The following table gives particulars concerning breweries in each State:—

BREWERIES, 1935-36.

Items.	N.S.W.	Vic.	Queensl.	W.A.	S.A.	Tas.	Australia.
						(d)	
Number of breweries ..	5	9	7	6	6	4	37
Number of employees ..	873	1,258	362	242	403	90	3,228
Average horse-power of engines used ..	6,186	4,160	1,864	1,035	1,973	701	15,919
Approximate value of land and buildings .. £	879,262	731,229	333,976	181,535	129,203	171,210	2,426,415
Approximate value of plant and machinery .. £	769,194	855,072	307,377	277,282	136,477	24,510	2,449,700
Wages paid .. £	249,828	423,316	107,572	77,282	136,477	24,510	1,018,985
Value of fuel used .. £	67,745	68,937	20,535	14,817	18,034	8,649	202,367
Value of materials used .. £	715,143	1,028,292	328,435	162,835	315,246	72,546	2,552,497
Value of production .. £	1,803,384	1,322,947	438,118	238,480	443,304	120,549	4,367,082

(a) Includes Malt Works.

(ii) *Total for Australia, 1931-32 to 1935-36.* The next table shows the output of this industry for the last five years:—

BREWERIES.—AUSTRALIA.

Items.	1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)
Number of breweries ..	41	41	42	41	37
Number of employees ..	2,882	2,888	2,995	3,097	3,228
Average horse-power of engines used ..	15,347	15,315	15,537	16,020	15,919
Approx. value of land and buildings .. £	2,426,415	2,426,415	2,426,415	2,426,415	2,426,415
Approx. value of plant and machinery .. £	2,449,700	2,449,700	2,449,700	2,449,700	2,449,700
Wages paid ..	889,039	854,371	886,507	952,127	1,018,985
Value of fuel used ..	187,452	183,428	180,002	194,803	202,367
Value of materials used ..	1,889,923	1,905,147	2,011,957	2,262,174	2,552,497
Total value of output ..	5,133,025	5,235,923	5,625,876	6,439,227	7,121,016
Value of production ..	3,055,650	3,147,348	3,424,017	3,892,190	4,367,082

(a) Includes Malt Works in Tasmania.

The quantity of ale and stout brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter the production increased each year to 70,110,615 gallons in 1935-36. For a number of years prior to the depression the consumption of ale and stout exceeded 12 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, but has now advanced to 9.60 gallons.

(iii) *Materials Used and Production.* The table below shows the quantity of raw material used and the quantity and value of ale and stout brewed in each State as furnished by the Excise Branch of the Department of Trade and Customs during the year 1935-36.

BREWERIES.—MATERIALS USED AND PRODUCTION. 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
RAW MATERIAL USED.							
Malt .. bushels	804,901	836,036	227,051	165,742	275,009	58,312	2,367,051
Hops .. lb.	693,455	729,086	172,442	104,911	176,825	37,592	1,974,311
Sugar .. cwt.	90,920	100,440	22,980	20,420	8,640	4,680	248,080

RAW MATERIAL USED PER 1,000 GALLONS OF ALE AND STOUT PRODUCED.

Malt .. bushels	32.49	32.07	35.01	31.99	45.00	39.27	33.76
Hops .. lb.	27.99	27.96	26.59	31.83	28.93	25.32	28.16
Sugar .. cwt.	3.67	3.85	3.15	3.94	1.41	3.15	3.54

ALE AND STOUT BREWED.

Quantity gallons	24,774,268	26,072,633	6,486,041	5,181,405	6,111,462	1,484,806	70,110,615
Value (a) £	2,608,505	2,745,211	686,845	411,637	714,335	188,935	7,355,468

(a) Exclusive of Excise duty.

30. *Distilleries.*—Distilleries are located in all the States with the exception of Western Australia and Tasmania. The following information, which has been extracted from returns furnished by the Excise Branch of the Department of Trade and Customs, shows the materials used in distilleries in Australia and the quantity of spirits distilled therefrom for the year 1935-36:—Materials used: barley 82,479 bushels; barley malt 87,669 bushels; molasses 1,114,017 cwt.; wine 10,891,628 gallons; raisins and currants 28,238 cwt.; grapes 87,689 cwt. The quantities of spirits distilled from barley, malt and grain were 434,825 gallons; from molasses 5,363,659 gallons; and from wine 2,448,634 gallons; total 8,247,118 gallons. The quantity of spirits denatured during the year was 3,377,127 gallons.

31. *Tobacco, etc., Factories.*—(i) *Details for each State, 1935-36.* During the year 1935-36 there were thirty-one establishments in which the manufacture of tobacco, cigars, or cigarettes was carried on. There were no tobacco factories in Tasmania.

TOBACCO, CIGAR AND CIGARETTE FACTORIES, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	9	14	6	1	1	31
Number of employees	1,505	1,112	1,020	19	172	3,450
Average horse-power of engines used	1,505	1,020	(a)	(a)	(a)	2,600
Approx. value of land and buildings	886,775	500,025	(a)	(a)	(a)	1,386,800
Approx. value of plant and machinery	193,001	243,444	(a)	(a)	(a)	436,445
Wages paid	555,864	369,102	(a)	(a)	(a)	925,790
Value of fuel used	11,143	8,814	(a)	(a)	(a)	20,553
Value of materials used	1,246,100	1,100,000	(a)	(a)	(a)	2,346,100
Total value of output	5,057,412	2,728,411	(a)	(a)	(a)	7,785,823
Value of production	1,349,773	1,008,871	(a)	(a)	(a)	2,358,644

(a) Not available for publication.
Australia.

(b) Including Queensland, South Australia and Western

(ii) *Total for Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had 11 factories, producing 177,744 lb. of manufactured tobacco; in the same year there was one factory in Victoria, but the quantity of tobacco manufactured is not available. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1935-36 comprised—manufactured tobacco 212,980 lb., cigars 9,802 lb., and cigarettes 1,634,818 lb., while the quantities manufactured in Australian factories were respectively 15,277,099 lb., 283,097 lb., and 5,304,632 lb. The following tables show the extent of the industry in Australia for the last five years:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of factories	24	30	31	29	31
Number of employees	4,119	4,142	4,395	4,818	5,155
Average horse-power of engines used ..	2,133	2,145	2,234	2,377	2,660
Approx. value of land and buildings ..	£ 912,541	910,547	916,971	927,122	936,521
Approx. value of plant and machinery ..	£ 656,862	663,060	658,850	784,371	726,713
Wages paid	£ 850,702	812,220	838,608	891,064	950,790
Value of fuel used	£ 26,013	23,088	18,596	18,661	20,553
Value of materials used	£ 5,448,306	4,823,564	5,003,766	5,373,582	6,082,506
Total value of output	£ 7,299,324	6,591,780	6,894,327	7,216,139	8,529,491
Value of production	£ 1,824,915	1,745,128	1,871,965	1,823,896	2,426,432

LEAF USED AND PRODUCTION.

Leaf used { Australian (Stemmed) 1,000 lb. ..	2,349	2,722	3,307	3,352	3,653
{ Imported (") " ..	14,076	14,103	13,718	13,768	14,662
Tobacco made	14,084	14,788	14,656	14,527	15,277
Cigars made	225	254	259	253	283
Cigarettes made	4,191	4,362	4,577	4,813	5,305

The production of locally-grown leaf for many years was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31; in 1932-33 the quantity of local leaf used fell to 2.7 million lb., but it has since increased to 3.7 million lb. In this connexion, see item "Tobacco" in Chapter XX.—Agricultural Production.

32. Saw-mills, etc.—(i) *Details for States, 1935-36.* The most important industry in Class X. is that of saw-milling. As separate particulars of forest saw-mills are not available for some of the States, both forest and other saw-mills, as well as plywood and bark mills, have been combined in the following table:—

SAW-MILLS, FOREST AND OTHER; PLYWOOD AND BARK MILLS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	445	315	317	60	93	213	1,443
Number of employees	4,584	4,071	4,414	933	1,937	1,358	17,297
Average horse-power of engines used ..	18,840	12,684	16,466	3,916	5,627	4,505	62,038
Approximate value of land and buildings ..	£ 752,104	380,596	352,482	176,602	213,738	93,396	1,971,918
Approximate value of plant and machinery ..	£ 648,721	555,235	610,114	135,387	573,600	178,607	2,702,063
Wages paid	£ 763,064	713,190	708,833	165,581	381,773	195,469	2,927,960
Value of fuel used	£ 13,917	37,050	37,803	7,350	25,532	16,181	170,795
Value of materials used	£ 2,410,573	1,116,302	1,640,688	643,360	614,670	238,314	6,663,907
Total value of output	£ 3,730,466	2,329,090	2,760,903	935,627	1,200,086	559,419	11,515,591
Value of production	£ 1,273,976	1,174,838	1,082,412	284,917	559,884	304,952	4,680,979

(ii) *Total for Australia, 1931-32 to 1935-36.* The development of forest and other saw-mills, etc., since 1931-32 is shown in the following table :—

SAW MILLS, FOREST AND OTHER : PLYWOOD AND BARK MILLS.—AUSTRALIA.

Items.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of establishments	1,161	1,229	1,276	1,405	1,443
Number of employees	8,338	10,102	12,298	15,333	17,297
Average horse-power of engines used	42,557	45,100	49,004	56,842	62,038
Approx. value of land and buildings	£ 1,902,307	£ 1,897,033	£ 1,899,729	£ 2,010,001	£ 1,974,918
Approx. value of plant and machinery	£ 2,611,804	£ 2,449,908	£ 2,460,047	£ 2,595,995	£ 2,701,000
Wages paid	£ 1,358,351	£ 1,643,210	£ 1,920,400	£ 2,519,745	£ 2,927,960
Value of fuel used	£ 95,573	£ 103,361	£ 115,433	£ 139,572	£ 170,705
Value of materials used	£ 2,651,895	£ 3,285,202	£ 4,022,263	£ 5,604,815	£ 6,663,907
Total value of output	£ 4,820,557	£ 5,968,080	£ 7,211,573	£ 9,814,197	£ 11,515,591
Value of production	£ 2,073,089	£ 2,579,517	£ 3,073,872	£ 4,069,780	£ 4,680,979

The table furnishes evidence of marked improvement during the past four years. The saw-mill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the height of the depression, had recovered to 562 million super. feet in 1935-36. Indications point to further increases as a result of developments in the building industry. Further reference is made to the saw-milling industry in Chapter XXII.—Forestry.

33. Furniture, Cabinet Making and Upholstery.—These industries constitute the principal manufactures in Class XI. The following table gives particulars for each State :—

FURNITURE, CABINET MAKING AND UPHOLSTERY FACTORIES, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	242	310	90	50	90	35	817
Number of employees	4,220	3,118	1,197	879	663	262	13,339
Average horse-power of engines used	5,973	3,920	1,588	1,920	797	476	14,074
Approximate value of land and buildings	£ 630,021	£ 566,473	£ 172,115	£ 126,693	£ 119,004	£ 30,076	£ 1,644,382
Approximate value of plant and machinery	£ 227,162	£ 140,326	£ 62,011	£ 69,860	£ 33,652	£ 13,034	£ 546,045
Wages paid	£ 727,326	£ 418,488	£ 213,147	£ 129,418	£ 103,810	£ 34,626	£ 1,626,815
Value of fuel used	£ 26,500	£ 18,519	£ 7,359	£ 7,055	£ 3,122	£ 1,591	£ 64,055
Value of materials used	£ 1,340,346	£ 732,509	£ 309,615	£ 236,716	£ 181,017	£ 34,871	£ 2,844,074
Total value of output	£ 2,489,033	£ 1,676,921	£ 620,274	£ 442,622	£ 354,912	£ 85,294	£ 5,678,056
Value of production	£ 1,113,178	£ 925,803	£ 312,400	£ 198,851	£ 170,773	£ 48,832	£ 2,769,927

34. Printing and Bookbinding Works. Printing and bookbinding works rank high in importance among the industries of Australia, and in 1935-36 afforded employment for about 25,186 employees, and paid more than £5,000,000 in salaries and wages, while the value of output amounted to £13,057,000. The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1935-36. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the next table :—

GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	299	399	84	94	85	22	983
Number of employees ..	6,155	5,772	1,645	1,614	827	475	16,468
Average horse-power of engines used ..	4,738	4,544	858	1,538	636	327	12,641
Approximate value of land and buildings ..	£ 1,308,940	1,450,762	315,630	598,700	207,005	77,323	3,958,360
Approximate value of plant and machinery ..	£ 1,179,558	991,061	176,055	415,155	156,401	70,560	2,988,790
Wages paid ..	£ 1,049,836	946,756	274,330	288,803	133,424	85,876	2,779,115
Value of fuel used ..	£ 33,391	32,516	8,645	10,180	4,438	3,603	92,773
Value of materials used ..	£ 1,196,127	1,109,818	220,442	318,305	138,034	48,817	3,031,573
Total value of output ..	£ 3,058,590	2,747,357	677,759	798,406	382,463	101,643	7,856,218
Value of production ..	£ 1,829,072	1,605,023	448,672	469,921	239,991	139,193	4,731,872

(a) Includes Newspapers and Periodicals.

ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
				(a)			
Number of factories ..	214	124	66	..	36	6	446
Number of employees ..	3,869	2,520	1,443	..	599	267	8,698
Average horse-power of engines used ..	6,489	3,615	2,457	..	1,320	217	14,098
Approximate value of land and buildings ..	£ 1,724,622	693,543	422,998	..	416,178	38,009	3,295,350
Approximate value of plant and machinery ..	£ 1,325,273	713,335	361,737	..	192,741	42,316	2,635,402
Wages paid ..	£ 994,335	669,225	320,977	..	157,338	60,551	2,222,426
Value of fuel used ..	£ 43,212	28,443	19,143	..	11,086	3,052	104,966
Value of materials used ..	£ 907,475	799,762	266,786	..	127,859	37,261	2,220,643
Total value of output ..	£ 2,782,785	1,925,273	831,772	..	420,669	100,038	6,100,407
Value of production ..	£ 1,681,538	1,106,068	545,843	..	281,724	159,625	3,774,798

(a) Included in General Printing and Bookbinding.

35. Tyres, Motor and Cycle.—(i) *Details for each State, 1935-36.* During the last decade, the number of motor car and cycle users has shown a considerable advance and this necessarily has had a stimulating effect on the industry engaged in the manufacture of motor and cycle tyres. Particulars for each State during 1935-36 are shown hereunder:—

TYRES, MOTOR AND CYCLE, 1935-36.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
						(a)	
Number of factories ..	90	89	19	27	25	10	260
Number of employees ..	2,226	1,497	113	146	64	52	4,098
Average horse-power of engines used ..	16,855	6,470	62	123	68	81	23,659
Approximate value of land and buildings ..	£ 784,048	336,673	37,252	53,730	34,377	11,720	1,257,800
Approximate value of plant and machinery ..	£ 473,388	268,869	15,697	16,678	7,039	5,942	786,713
Wages paid ..	£ 1,482,414	713,113	21,742	30,022	15,886	6,777	2,260,954
Value of materials used ..	£ 2,245,525	1,363,826	54,304	66,510	38,615	19,553	3,788,333
Total value of output ..	£ 686,082	596,879	31,068	34,334	21,523	11,951	1,381,837

(a) Includes Boots and Shoes and Other Rubber Goods.

(ii) *Total for Australia, 1931-32 to 1935-36.* Prior to 1930-31 particulars regarding this industry were included with Rubber Goods but separate details are now available and are shown in the following table for the last five years:—

TYRES, MOTOR AND CYCLE.—AUSTRALIA.

Items.	1931-32. (a)	1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)
Number of factories	256	279	279	261	260
Number of employees	3,314	3,215	3,489	3,993	4,098
Average horse-power of engines used	26,022	20,937	22,442	22,566	23,659
Approx. value of land and buildings	£ 1,739,591	£ 1,307,004	£ 1,311,306	£ 1,240,749	£ 1,257,800
Approx. value of plant and machinery	£ 2,600,780	£ 2,700,000	£ 2,800,000	£ 2,800,000	£ 2,800,000
Wages paid	£ 603,802	£ 540,856	£ 635,547	£ 736,865	£ 786,713
Value of fuel used	£ 149,076	£ 112,558	£ 126,471	£ 134,335	£ 136,542
Value of materials used	£ 1,600,092	£ 1,347,737	£ 1,681,151	£ 2,173,447	£ 2,209,954
Total value of output	£ 3,188,445	£ 2,440,809	£ 2,850,447	£ 3,499,132	£ 3,788,333
Value of production	£ 1,349,277	£ 989,514	£ 1,051,825	£ 1,191,350	£ 1,381,837

(a) Includes Boots and Shoes and Other Rubber Goods for Tasmania.

It will be noted that the value of output for the year 1935-36 is the greatest recorded since the manufacture of motor and cycle tyres was shown as a separate industry.

36. *Electric Light and Power Works.*—(i) *Details for each State, 1935-36.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1931-32 the production of electric light and power has increased from 2,507 to 5,528 million British units, or by more than 40 per cent. Particulars for the year 1935-36 are as follows:—

ELECTRIC LIGHT AND POWER WORKS, 1935-36.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	124	93	49	44	89	5	404
Number of employees	2,033	1,414	815	1,387	509	125	6,283
Average horse-power of engines used	582,125	175,661	72,249	144,215	73,066	87,954	1,135,273
Approximate value of land and buildings	£ 4,919,422	£ 2,054,772	£ 488,780	£ 607,822	£ 246,442	£ 26,616	£ 8,343,854
Approximate value of plant and machinery	£ 10,197,261	£ 6,336,408	£ 2,509,724	£ 1,984,532	£ 1,206,447	£ 3,320,401	£ 25,554,863
Wages paid	£ 554,594	£ 312,977	£ 214,074	£ 339,308	£ 133,846	£ 31,482	£ 1,586,881
Value of fuel used	£ 1,314,832	£ 515,705	£ 262,221	£ 212,509	£ 308,076	£ 68	£ 2,704,011
Total value of output	£ 5,186,270	£ 1,677,499	£ 948,501	£ 1,134,483	£ 909,700	£ 481,183	£ 10,337,645

(ii) *Production 1931-32 to 1935-36.* The increase in the production of electric light and power in each of the States during the five years is clearly shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS.—PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.
1931-32	1,075,706	704,639	122,067	133,677	127,581	343,262	2,509,935
1932-33	1,154,457	778,650	134,080	148,348	145,278	354,749	2,715,562
1933-34	1,227,873	830,910	168,996	165,598	160,130	356,670	2,010,177
1934-35	1,349,248	900,247	202,030	176,434	171,209	399,887	3,100,055
1935-36	1,464,898	974,722	224,014	200,488	204,373	450,408	3,527,903

37. Gas Works. --(i) *Details for each State, 1935-36.* Gas works are in operation in the majority of important towns in Australia. New South Wales returned seven coke factories and Queensland three, working as separate industries, but under the new classification these are included in Class I. Treatment of Non-metalliferous Mine and Quarry Products. The subjoined table gives particulars of gas works in each State for the year 1935-36:—

GAS WORKS, 1935-36.

Items.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	44	39	16	5	4	2	110
Number of employees ..	1,259	785	258	565	128	72	3,067
Average horse-power of engines used ..	4,834	3,204	915	1,892	209	107	11,161
Approximate value of land and buildings ..	£ 884,814	£ 472,041	£ 157,285	£ 52,896	£ 30,337	£ 49,928	£ 1,647,301
Approximate value of plant and machinery ..	£ 3,114,318	£ 1,858,141	£ 458,087	£ 1,165,094	£ 152,507	£ 149,471	£ 6,897,618
Wages paid ..	£ 282,131	£ 164,739	£ 66,707	£ 140,681	£ 30,563	£ 18,075	£ 722,896
Value of fuel used ..	£ 201,299	£ 142,814	£ 5,039	£ 35,042	£ 19,246	£ 4,209	£ 407,649
Value of materials used ..	£ 645,947	£ 645,423	£ 131,477	£ 118,831	£ 51,198	£ 19,138	£ 1,612,014
Total value of output ..	£ 2,246,373	£ 1,496,610	£ 359,717	£ 508,666	£ 177,426	£ 77,659	£ 4,866,481
Value of production ..	£ 1,399,127	£ 708,373	£ 223,201	£ 354,823	£ 106,982	£ 54,312	£ 2,846,818

(a) Includes Hydraulic Power.

(ii) *Coal Used and Production, 1935-36.* The following table gives details for the year 1935-36:—

GAS WORKS.—COAL USED AND PRODUCTION, 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal tons	534,140	352,324	82,725	69,884	22,637	10,971	1,072,681
PRODUCTS.							
Gas .. 1,000 cubic feet	19,125,281	6,126,556	1,323,132	1,096,249	477,291	144,801	19,437,670
Coke tons	336,357	224,444	28,896	43,528	13,344	4,709	651,278
VALUE.							
Gas £	1,144,477	1,134,007	341,149	374,283	147,094	55,427	3,394,677
Coke £	374,714	325,000	29,141	70,501	29,373	8,085	836,955

The maximum output of gas was 20,929,569 thousand cubic feet in 1929-30. The production declined to an average of 17,800,000 thousand cubic feet during the three years ended June, 1934, but in the past two years made notable gains to 19,437,670 thousand cubic feet in 1935-36.

CHAPTER XXV.

WATER CONSERVATION AND IRRIGATION.

§ 1. Artesian Water.

1. *General.*—In every country subject to droughts, the provision of adequate systems of water conservation is a matter of prime importance. Much has been done in Australia so far as the supply of water to centres of population is concerned, and a description of the principal water-works in each State will be found in Chapter IV.—Local Government.

Interstate Conferences on the subject of artesian water were held in 1912, 1914, 1921, 1924 and 1928, when combined Governmental action was agreed upon with reference to delimitation of the artesian basins, hydrographic surveys, reason for decrease in flow, analyses and utilization of artesian water, etc. A map showing the extent of the known artesian basins will be found on pages 829-30.

2. *The Great Australian Artesian Basin.*—The area known as the "Great Australian Artesian Basin," includes (a) considerably more than one-half of Queensland, taking in practically all that State lying west of the Great Dividing Range, with the exception of an area in the north-west contiguous to the Northern Territory; (b) a considerable strip of New South Wales along its northern boundary and west of the Great Dividing Range; and (c) the north-eastern part of South Australia proper, together with the extreme south-eastern corner of the Northern Territory. This basin (shown approximately by the map on pages 829-30) is said to be the largest yet discovered, and measures about 600,000 square miles, of which 376,000 square miles are in Queensland, 118,000 square miles in South Australia, 80,000 square miles in New South Wales, and 25,000 square miles in the Northern Territory. The area of the intake beds is estimated at 60,010 square miles, viz., 50,000 square miles in Queensland and 10,010 square miles in New South Wales. A description of the basin and its geological formation will be found in previous issues of the Official Year Book (see No. 6, p. 569).

3. *The Western Australian Basins.* The Western Australian Basins fall naturally within five distinct groups, viz., the Eucla Basin, in the extreme south-east of the State, extending well into South Australia along the shores of the Great Australian Bight; the Coastal Plain, west of the Darling Range; the North-West Basin, between the Murchison and Ashburton Rivers; the Gulf Basin, between Cambridge Gulf and Queen's Channel; and the Desert Basin, between the De Grey and Fitzroy Rivers.

The Recent and Tertiary strata which enter Western Australia at its eastern border, and which have a prevailing dip towards the Great Australian Bight, form the Eucla artesian water area. Where boring operations have been undertaken, the water has been found to be salt or brackish, and there are other conditions affecting the supply, such as local variations in the thickness of the beds, their relative porosity, and the unevenness of the floor upon which they rest, which, so far, have not been examined with sufficient thoroughness to enable many particulars to be given in regard to this basin.

In the Coastal Plain Basin to the west of the Darling Ranges, artesian boring has, on the other hand, been carried on successfully for many years.

4. *The Murray River Basin.*—The Murray River Basin extends over south-western New South Wales, north-western Victoria, and south-eastern South Australia. It is bounded on the west by the azoic and palaeozoic rocks of the Mount Lofty and other

ranges extending northwards from near the mouth of the Murray to the Barrier Range, and on the east and north-east by the ranges of Victoria and New South Wales. This tertiary water-basin is occupied by a succession of sedimentary formations, both porous and impervious. It is of interest to note that the waters of the Murray River are partly supplied by influx from the water-bearing beds of this basin; this is proved by the fact that, at low water, springs are observed at certain places flowing into the river bed from beneath the limestone cliffs from Pyap Bend downwards. Similar springs exist along the courses of other branches of the River Murray system, where they cut through the tertiary formation. On the Victorian side, bores have been put down, and water has been struck at various levels.

5. **Plutonic or Meteoric Waters.**—In previous Year Books will be found a statement of the theory of Professor Gregory* as to the origin of the water in the Australian artesian basins, together with the objections held thereto by a former Government Geologist of New South Wales.† (See Official Year Book No. 6, p. 576).

6. **Artesian and Sub-Artesian Bores.**—(i) *General.* The following table gives particulars regarding artesian and sub-artesian bores in each State and in the Northern Territory:—

ARTESIAN AND SUB-ARTESIAN BORES, 1935-36.

Particulars.		N.S.W.	Vic.	Q'land.	S. Aust. (c)	W. Aust.	N. Ter.	Australia.
Bores existing ..	No.	671	380	5,072	162	268	191	(e)6,744
Total depth of existing bores ..	feet	61,055,305	104,000	4,301,763	115,598	230,392	63,375	25,876,433
Daily flow ..	1,000 gals.	(d)66,585	715	254,792	12,971	(d)	7,223	(e)342,780
Depth at which artesian water was struck—								
Maximum ..	feet	4,338	2,750	6,000	4,851	4,006	1,760	6,000
Minimum ..	feet	100	22	10	233	30	42	10
Temperature of flow—								
Maximum ..	°Fahr.	140½	147	212	208	(d)	(d)	212
Minimum ..	°Fahr.	75	70	78	82	(d)	(d)	70

(a) Flowing bores only.

(b) Total depth of all bores.

(c) Government bores only.

(d) Not available.

(e) Incomplete.

(ii) *Details for States.*—Considerations of space preclude the insertion of separate particulars of operations in the States during the year 1934-35. Details for earlier years will, however, be found in issues of the Official Year Book prior to No. 24, 1931.

§ 2. Irrigation.

1. **General.**—Australia's first experiments in irrigation were made with the object of bringing under cultivation areas in which an inadequate rainfall rendered agricultural and even pastoral occupations precarious and intermittent, and, although these original settlements have generally proved fairly successful, most of the States, instead of promoting new settlement in unoccupied regions, are adopting the policy of making existing settlements closer, by repurchasing large estates, and dividing them into holdings of suitable sizes for cultivation, and selling the land upon easy terms of payment. It is in connexion with this Closer Settlement policy that the special value of irrigation is recognized. Information regarding the various irrigation schemes in operation was given in some detail in preceding issues of the Official Year Book (see No. 13, pages 637 to 661).

* See J. W. Gregory, F.R.S., D.Sc.: "The Dead Heart of Australia." London, John Murray, 1906; and "The Flowing Wells of Central Australia," Geogr. Journ., July and August, 1911.

† F. E. Pittman, J.R.S.M., formerly Government Geologist of New South Wales: "Principles of the Artesian Water Supply of Australia, with special reference to Professor Gregory's Theory." (Clarke Memorial Lecture, delivered before the Royal Society of New South Wales, 31st October, 1907); "The Great Australian Artesian Basin," Sydney, 1914; and "The Composition and Porosity of the Intake Beds of the Great Australian Artesian Basin," Sydney, 1915.

2. Areas Irrigated.—The following table gives the areas irrigated in each State in the years 1926-27 to 1935-36. Victoria shows the largest irrigated acreage, the area so returned in 1935-36 amounting to 495,835 acres, or 66.6 per cent. of the total for Australia. New South Wales for the same year returned an area of 138,016 acres, or 18.6 per cent. of the total. The areas under irrigation in the remaining States are relatively very small:—

IRRIGATION.—AREAS IRRIGATED.

Season.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1926-27 ..	89,528	406,532	38,044	35,443	3,756	7,552	581,185
1927-28 ..	102,533	477,500	21,411	38,379	4,292	7,016	651,131
1928-29 ..	123,129	471,095	25,344	39,236	4,907	7,054	(a) 671,475
1929-30 ..	126,321	566,577	26,282	40,002	4,943	6,603	770,818
1930-31 ..	135,121	463,098	26,947	43,538	5,661	6,488	680,853
1931-32 ..	114,777	418,415	28,414	42,813	6,104	7,768	618,291
1932-33 ..	130,977	474,716	31,409	42,556	6,434	7,605	685,197
1933-34 ..	131,772	435,324	29,363	42,898	7,640	9,194	656,191
1934-35 ..	125,423	494,226	34,138	39,594	8,861	7,786	(b) 710,054
1935-36 ..	138,016	495,835	44,283	42,672	11,396	8,987	(c) 741,313

(a) Including 102 acres New South Wales. Total 671,475 acres. (b) Including 26 acres Federal Capital Territory. (c) Including 123 acres Federal Capital Territory.

3. Crops on Irrigated Areas.—A classification of the crops grown on the irrigated areas in each State during the year 1935-36, together with the averages for Australia during the quinquennium 1927-28 to 1931-32, will be found in the table hereunder. Lucerne, grasses and green forage accounted for 34 per cent., cereals for 23 per cent., orchards and vineyards for 28 per cent., and root crops, market gardens, &c., for about 15 per cent. of the total area under irrigation in 1935-36. It should be noted, however, that the area under crop in Victoria does not include 258,620 acres of pasture land and fallow land which was irrigated in 1935-36. Likewise 6,571 acres of pasture land are also omitted from the Tasmanian figures for the same year.

IRRIGATION.—CROPS ON IRRIGATED AREAS, 1935-36, AND 1927-28 TO 1931-32.

Crop.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tas- mania.	Total.	Average 1927-28 to 1931-32.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cereals ..	71,871	39,835	55	..	45	..	111,800	127,205
Lucerne, Grasses and Green ..	30,518	112,043	613	10,212	7,749	..	151,135	200,206
Orchards and Vineyards ..	26,048	67,319	5,691	27,766	2,315	934	130,073	127,777
Root Crops, Market Gardens and other Crops	9,579	18,018	(a) 37,924	4,694	1,287	(b) 1,383	72,885	14,710
Total ..	138,016	237,215	44,283	42,672	11,396	2,416	475,998	514,193

(a) Including Sugar Cane, 35,759 acres; Cotton, 1,160 acres; and Tobacco, 1,005 acres.
(b) Including Hops, 881 acres.



This map was published in the Report of the Fifth Interstate Conference on Artesian Water, Sydney, 1928, and is reproduced with the permission of the Water Conservation and Irrigation Commission of New South Wales.

CHAPTER XXVI. PRIVATE FINANCE.

A. GENERAL.

In issues of the Official Year Book prior to No. 25 information relating to Private Finance was included in the Chapter dealing with Finance generally, but commencing with that issue a separate Chapter has been devoted thereto. The Chapter is subdivided into the following sections:—

Banking, including Savings Banks;
Companies;
Insurance;
Friendly Societies; and
Probates.

B. BANKING.

§ 1. Cheque-Paying Banks.

1. *Banking Legislation.*—(i) *Commonwealth Legislation.* Under Section 51 of the Commonwealth Constitution Act, the Commonwealth Parliament has power to legislate with respect to "Banking, other than State banking, also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money." Similar powers regarding bills of exchange and promissory notes are also granted under this section. The principal legislation enacted comprises the following: The Commonwealth Bank Act 1911-1932 constituting the Commonwealth Bank and providing for its management and that of the note issue; the Bank Notes Tax Act 1910 designed to force private notes out of circulation; and the Bills of Exchange and Promissory Notes Act 1909-1930 regulating the issue of bills of exchange, cheques and promissory notes.

(ii) *State Legislation.* The Acts under which the various banks are incorporated differ somewhat. While most of the older banks were incorporated by special Act or Charter, *e.g.*, the Bank of New South Wales, by Act of Council 1817; the Bank of Australasia, by Royal Charter; the Bank of Adelaide, by Act of the South Australian Parliament; and the Bank of New Zealand, by Act of the General Assembly of New Zealand, the newer banks are generally registered under a "Companies Act," or some equivalent Act. This is also the case with those banks which, after the crisis of 1893, were reconstructed. Banks transacting business in any State are obliged, under the existing State laws, to furnish a quarterly statement of their assets and liabilities, and they have since the year 1908 furnished to the Commonwealth Statistician, under the Census and Statistics Act 1905-1930, quarterly statements which contain the average of the thirteen weekly statements prepared by each bank. These returns form the basis on which the statistics included herein have been compiled.

2. *Royal Commission on Monetary and Banking Systems.*—A Royal Commission was appointed by the Commonwealth Government in November, 1935, to inquire into the monetary and banking systems at present in operation in Australia and to report whether any, and if so what, alterations are desirable in the interests of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report on 15th July, 1937, and a summary of the recommendations is published in the Appendix to this issue.

3. *Presentation of Banking Statistics.*—In presenting statistical tabulations relating to average liabilities and assets, it is considered desirable to show the figures for the Commonwealth Bank separately from those of other Cheque-paying Banks. The

aggregate business of all trading banks is, however, given in additional paragraphs. Previously it was customary to show separate figures for each State, but this practice has now been discontinued. The figures quoted in all cases refer to the average liabilities and assets within the Commonwealth of Australia.

4. Banks in Operation, Capital Resources, etc.—(i) Year 1936. The paid-up capital of Cheque-paying Banks, together with their reserve funds, the dividend rate per cent., and the amount of their last dividends are shown in the following table. The information relates to the balance-sheet last preceding the 30th September, 1936. In regard to the reserve funds it must be noted that in the case of some of the banks these are invested in Government securities, while in other cases they are used in the ordinary business of the banks, and in a few instances they are partly invested and partly used in business :—

CHEQUE-PAYING BANKS.—CAPITAL RESOURCES, 1936.

Bank.	Paid-up Capital.	Reserves.	Balance on Profit and Loss Account. (g)	Total Shareholders' Funds.	Reserve Liability of Shareholders.	Dividends. (h)	
						Amount for year.	Average Rate per cent.
£	£	£	£	£	£	£	%
Australian Joint-Stock Banks—							
Bank of New South Wales ..	8,780,000	6,150,000	261,200	15,191,200	8,780,000	460,950	5½
Commercial Banking Co. of Sydney Ltd.	4,739,012	4,300,000	252,396	9,291,408	4,739,013	284,341	6
National Bank of Australasia Ltd. ..	5,000,000	3,300,000	296,913	8,596,913	1,800,000	262,500	5½
Commercial Bank of Australia Ltd. ..	4,117,350	2,250,000	207,943	6,575,293	..	201,360	Ord. 5½ Pref. 4
Ballarat Banking Co. Ltd. ..	153,000	100,000	13,602	266,602	87,000	8,033	5½
Queensland National Bank Ltd. ..	1,750,000	860,000	54,936	2,664,936	..	70,000	4
Brisbane Permanent Building and Banking Co. Ltd. ..	736,180	(g) 185,000	24,153	945,333	13,820	34,457	5
Bank of Adelaide ..	1,250,000	1,000,000	61,970	2,311,970	1,250,000	50,000	4
Bank of Australasia ..	4,500,000	4,475,000	330,485	9,305,485	4,500,000	270,281 (f)	6½ 100
Union Bank of Australia Ltd. ..	4,000,000	4,850,000	266,864	9,116,864	8,000,000	220,000	5½
English, Scottish and Australian Bank Ltd.	3,000,000	3,265,000	466,787	6,731,787	2,000,000	150,000	5
Total Australian Joint-Stock Banks	38,025,542	30,735,000	2,237,249	70,997,791	31,109,833	2,011,922	..
Other Cheque-paying Banks—							
Commonwealth Bank of Australia—							
General Bank ..	4,000,000	2,240,570	..	6,240,570	..	..	..
Rural Credits ..	2,000,000	298,821	..	2,298,821	..	..	..
Rural Bank of New South Wales (e) ..	a 13,992,893	11,307,728	..	15,300,621	..	..	..
State Bank of South Australia ..	b 2,000,000	..	..	2,000,000	..	..	..
Bank of New Zealand ..	6,328,125	3,575,000	619,960	10,523,085	..	574,219	(c)
Comptoir National d'Escompte de Paris (d) ..	3,225,806	3,562,084	406,881	7,194,771	..	322,580	10
Yokohama Specie Bank Ltd. (d)	10,000,000	12,915,000	1,719,665	24,634,665	..	1,000,000	10

(a) Stock and debentures issued. (b) Capital advanced by Government of South Australia and Sale of Bonds. (c) Preference "A." 10 per cent.; Preference "B." 7½ per cent.; "C." Long Term Mortgage, 6 per cent.; "D." Long Term Mortgage, 7½ per cent.; Ordinary, 10 per cent. (d) Approximate. (e) See letterpress (ii) (a) following. (f) 7½ per cent. less British Income Tax of 4s. 6d. in £. (g) Includes dividends declared but not paid at date of balance-sheet. (h) Dividends paid and payable out of profits earned during 1935-36. (i) Includes £613,450 Special Reserve Account established under Section 12 (2) of Rural Bank of New South Wales Act 1932.

(ii) *Suspension of Payments.* (a) *Rural Bank Department, Government Savings Bank of New South Wales.*—Particulars regarding the suspension of payments by the Rural Bank Department of the Government Savings Bank of New South Wales in 1931 and its subsequent absorption by the Commonwealth Bank were given in Official Year Book No. 26, page 437. Steps for the rehabilitation of the Rural Bank Department reached fruition in December, 1932, when assent was given to an Act (No. 63, 1932) which provided for the reconstitution of the Government Savings Bank under the new title of "Rural Bank of New South Wales". It also provided for the creation of a Government Agency Department and conferred on the Bank certain powers of management and of borrowing, etc.

(b) *Primary Producers' Bank of Australia Ltd.* On the 24th August, 1931, the Primary Producers' Bank of Australia Ltd. was forced to close and the business of the bank has now been wound up.

(iii) *Amalgamations.* The amalgamation of the Australian Bank of Commerce Ltd. with the Bank of New South Wales became effective from the 17th November, 1931.

On the 12th November, 1931, the Brisbane Permanent Building and Banking Co. Ltd. and the Queensland Deposit Bank amalgamated, and in March, 1932, the Brisbane Permanent Building and Banking Co. Ltd. absorbed the Federal Deposit Bank which had suspended payments in September, 1931.

5. Commonwealth Bank.—(i) *General.* A brief account of the foundation of the Commonwealth Bank was given in Nos. 6 to 10 of the Official Year Book. The Bank began operations in the Savings Bank Department in July, 1912, and general banking was commenced in January, 1913. In 1920 the note issue passed to the control of the Bank.

The scope of the Bank was considerably broadened in 1924 when the control was entrusted to a Board of Directors consisting of a Governor, the Secretary to the Treasury, and six others "who are or have been actively engaged in agriculture, commerce, finance or industry." Commencing without any capital the Bank had accumulated profits amounting to about £4,500,000 in 1924. Of this sum £4,000,000 was transferred to the capital fund of the Bank, and authority was given to increase the capital to £20,000,000. When it was in a position to do so the Board was to fix and publish the rates at which it would discount and rediscount bills of exchange. The trading banks were required to settle their balances by cheques drawn on the Commonwealth Bank, but there was to be no compulsion regarding the amount to be kept; subsequently the banks voluntarily opened accounts with the Commonwealth Bank. All banks were required to furnish to the Treasurer quarterly statements of their average weekly liabilities and assets on a basis similar to that used previously in furnishing statistics to State authorities. No alteration was made regarding the distribution of the profits of the Bank. Apart from the net earnings of the note issue which are payable to the revenue of the Commonwealth, one-half of the profits are allocated to the Bank Reserve Fund and the other half to the National Debt Sinking Fund on Commonwealth account. Action has not yet been taken to increase the capital of the Bank nor has a discount rate been published.

A Rural Credits Department of the Bank was created by amending legislation in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce. Portion of the capital for the new Department to the extent of £2,000,000 was provided by an annual appropriation of 25 per cent. of the net profits of the note issue.

The Commonwealth Bank Act 1927 provided for the separation of the Savings Bank Department from the General Bank and its establishment as a separate institution, and the transfer to the "Commonwealth Savings Bank of Australia" of all assets and liabilities of the Savings Bank Department. The date on which this amending Act became operative was fixed by proclamation as the 9th June, 1928. The new institution

was to be managed by a Commission consisting of three Commissioners, one of whom was to be a member of the Bank Board, but, as appointments to the Commission have not yet been made, the Bank Board is still controlling the Savings Bank.

The operations of the Bank, which holds in addition to the Commonwealth Government's accounts, those of the States of Victoria (portion only), Queensland, South Australia, Western Australia and Tasmania, and many local governing bodies, have developed towards those of a Central Bank. Unlike ordinary commercial banks, it does not offer special inducements to attract private accounts. The Bank played a most important part in the financing of Government deficits during the depression years. References to this aspect of its business are given in the Appendix (*see under "Financial Crisis"*). Since the 1st July, 1927, the Bank has published a weekly statement of the accounts of the note issue and general banking departments of the Bank.

(ii) *Aggregate Profits.* Particulars of the aggregate net profits from the initiation of the Bank to the end of each of the last five financial years are as follows :—

COMMONWEALTH BANK.—AGGREGATE PROFITS.

Aggregate Net Profit to Date.				
Date.	General Bank.	Savings Bank.	Rural Credits Department.	Total.
	£	£	£	£
30th June, 1932 ..	6,943,943	2,781,996	328,078	10,054,017
" 1933 ..	7,318,425	3,052,511	370,962	10,741,898
" 1934 ..	7,755,163	3,329,950	430,530	11,515,643
" 1935 ..	8,192,336	3,643,844	479,587	12,315,767
" 1936 ..	8,611,922	3,978,570	524,746	13,115,238

In accordance with the provisions of section 30 of the Bank Act and section 9 (2) of the National Debt Sinking Fund Act, half of the net profits of the Bank have been placed to the credit of the Bank's Reserve Fund and half to the credit of the National Debt Sinking Fund. Up to 30th June, 1930, the latter fund had benefited to the extent of £4,093,252.

(iii) *Liabilities in Australia.*—(a) Year 1936-37. The following table gives particulars of the average liabilities in Australia for each quarter from September, 1930, to June, 1937 :—

COMMONWEALTH BANK OF AUSTRALIA.—LIABILITIES, QUARTERLY AVERAGES.(c)

Quarter Ended—	Bills in Circulation.	Balances Due to Other Banks. (b)	Deposits.			Total Liabilities
			Not Bearing Interest.(a)	Bearing Interest.	Total Deposits.	
	£	£	£	£	£	£
September, 1936	225,763	16,767,019	14,363,408	32,857,877	47,221,285	64,214,067
December, 1936 ..	200,843	17,737,802	10,436,281	34,283,356	50,719,637	68,717,034
March, 1937 ..	250,010	23,095,175	11,076,749	33,895,030	48,971,779	72,818,470
June, 1937 ..	274,326	24,459,313	10,534,597	37,635,236	54,169,833	78,903,472

(a) Government "Set-off" Accounts (Interstate) deducted.

(b) Includes deposits of "Other Cheque-paying Banks".

(c) Excludes Commonwealth Savings Bank.

(b) *Quarters ended June, 1933 to 1937.* The average liabilities in Australia for the quarter ended June in each of the years 1933 to 1937 are given in the table below. In any comparisons with previous years, it should be noted that the Savings Bank Department operated independently from the 9th June, 1928.

COMMONWEALTH BANK OF AUSTRALIA.—AVERAGE LIABILITIES, QUARTERS ENDED JUNE.(c)

Quarter Ended June—	Bills in Circulation.	Balances Due to Other Banks. (b)	Deposits.			Total Liabilities.
			Not Bearing Interest.(a)	Bearing Interest.	Total Deposits.	
	£	£	£	£	£	£
1933..	1,416,206	23,553,055	6,336,555	33,088,720	39,425,275	64,394,536
1934..	317,141	38,367,104	12,374,013	28,589,797	40,963,810	79,648,055
1935..	227,964	32,681,964	11,757,699	33,542,161	45,299,860	69,209,788
1936..	240,081	16,038,233	11,992,817	33,683,557	45,676,404	62,854,718
1937..	274,326	24,459,313	16,534,597	37,635,236	54,169,833	78,993,472

(a) Government "Set-off" Accounts (Interstate) deducted. (b) Includes deposits of "Other Cheque-paying Banks". (c) Excludes Commonwealth Savings Bank.

(iv) *Assets in Australia.* (a) *Year 1936-37.* The average assets in Australia for each quarter of the year 1936-37 were as follows :—

COMMONWEALTH BANK OF AUSTRALIA.—ASSETS, QUARTERLY AVERAGES.(b)

Quarter Ended—	Coin.	Bullion.	Austra- lian Notes.	Govern- ment and Municipal Securities. (a)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).	Total Assets.
	£	£	£	£	£	£	£	£	£
September, 1936	785,056	367,622	5,388,055	42,417,313	794,331	107,596	23,082	9,727,005	59,574,133
December, 1936	688,057	371,744	4,399,910	43,360,393	770,966	119,077	41,892	9,879,242	61,542,781
March, 1937 ..	706,296	498,169	4,398,147	47,777,252	766,719	104,610	74,702	11,134,767	65,460,671
June, 1937 ..	740,085	330,535	4,172,308	43,626,856	762,422	91,318	29,834	11,311,802	61,065,160

(a) Includes short-term loans in Australia. Government "Set-off" Accounts (Interstate) deducted.
(b) Excludes Commonwealth Savings Bank.

(b) *Quarters ended June, 1933 to 1937.* Particulars of the average assets in Australia for the quarter ended June in each of the last five years are given in the following table :—

COMMONWEALTH BANK OF AUSTRALIA.—AVERAGE ASSETS, QUARTERS ENDED JUNE.(a)

Quarter Ended June—	Coin.	Bullion.	Austra- lian Notes.	Govern- ment and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).	Total Assets.
	£	£	£	£	£	£	£	£	£
1933 ..	843,572	87,834	5,602,312	47,001,964	939,270	92,514	6,458	7,108,522	61,682,155
1934 ..	726,573	111,262	6,386,613	45,579,777	910,979	83,500	8,426	6,919,074	60,720,210
1935 ..	660,426	152,345	5,010,741	43,837,001	873,892	94,919	9,753	7,448,841	58,088,518
1936 ..	718,802	381,112	5,184,487	40,008,305	818,301	122,010	14,140	9,398,104	50,798,873
1937 ..	740,085	330,535	4,172,308	43,626,856	762,422	91,318	29,831	11,311,802	61,065,160

(a) Excludes Commonwealth Savings Bank. (b) Includes short-term loans in Australia. Government "Set-off" Accounts (Interstate) deducted.

6. **Other Cheque-Paying Banks.**—(i) *General.* The term "Other Cheque-paying Banks" has been adopted in preference to "Joint-stock Banks." The latter term although used for some time was not strictly correct, as the statistics relating thereto for recent years included returns for the Rural Bank Department of the Government Savings Bank of New South Wales (now Rural Bank of New South Wales) and the State Bank of South Australia, both of which are governmental banking institutions. The figures showing average liabilities and assets given in paragraphs (ii) and (iii) immediately following are, however, comparable with those given under "Joint-stock Banks" in previous issues of the Official Year Book.

(ii) *Liabilities in Australia.* (a) *Year 1936-37.* Particulars of the average liabilities in Australia of "Other Cheque-paying Banks" for each quarter from September, 1936, to June, 1937, are given in the table following:—

OTHER CHEQUE-PAYING BANKS.—LIABILITIES, QUARTERLY AVERAGES.

Quarter Ended—	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.	Bearing Interest.	Total.	
	£	£	£	£	£	£	£
September, 1936	167,415	2,640,631	1,333,302	104,050,821	186,687,600	290,738,511	294,879,859
December, 1936	167,398	2,977,333	1,451,184	111,697,844	186,484,824	298,152,668	302,748,583
March, 1937 ..	167,384	3,034,852	2,195,229	121,754,960	192,592,523	314,347,483	319,744,948
June, 1937 ..	167,360	2,781,746	2,255,107	121,387,658	199,152,389	320,540,047	325,744,260

(b) *Quarters ended June, 1933 to 1937.* The next table shows the average liabilities in Australia of "Other Cheque-paying Banks" for the quarters ended June from 1933 to 1937.

**OTHER CHEQUE-PAYING BANKS.—AVERAGE LIABILITIES,
QUARTERS ENDED JUNE.**

Quarter Ended June.	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities
				Not Bearing Interest.	Bearing Interest.	Total.	
	£	£	£	£	£	£	£
1933 ..	180,937	2,161,091	1,706,020	89,463,673	190,887,142	280,350,815	284,398,863
1934 ..	173,590	2,376,476	1,525,842	101,853,623	201,217,703	303,071,326	307,147,234
1935 ..	169,063	2,560,738	1,253,127	107,329,157	190,719,845	298,049,002	302,031,930
1936 ..	167,447	2,781,007	1,506,085	110,880,611	187,491,212	298,371,823	302,488,582
1937 ..	167,360	2,781,746	2,255,107	121,387,658	199,152,389	320,540,047	325,744,260

(iii) *Assets in Australia.* (a) *Year 1936-37.* The average assets in Australia of the banks are shown in the following table:—

OTHER CHEQUE-PAYING BANKS.—ASSETS, QUARTERLY AVERAGES.

Quarter Ended—	Coin.	Bullion.	Austra- lian Notes and Cash with Common- wealth Bank.	Govern- ment and Municipal Securities.	Landed and House Pro- perty.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Over- drafts, and all other Assets.	Total Assets.
	£	£	£	£	£	£	£	£	£
September, 1936	167,290	360,454	28,547,847	44,426,889	9,128,391	2,570,623	1,801,733	286,386,384	374,894,611
December, 1936	171,108	362,827	30,777,812	42,771,873	9,322,731	2,020,274	2,227,400	287,037,622	370,707,663
March, 1937 ..	183,848	481,310	35,891,159	45,140,518	9,201,085	2,837,504	2,505,551	282,053,680	380,040,230
June, 1937	170,384	515,008	39,877,295	40,004,134	9,307,500	2,775,214	2,185,771	282,062,158	382,501,647

(b) *Quarters ended June, 1933 to 1937.* The average assets in Australia of "Other Cheque-paying Banks" for the quarter ended June in each of the years 1933 to 1937 are given below :—

OTHER CHEQUE-PAYING BANKS.—AVERAGE ASSETS,
QUARTERS ENDED JUNE.

Quarter Ended June.	Coin and Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities.	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all Other Assets.	Total Assets.
	£	£	£	£	£	£	£	£
1933	1,875,381	39,536,446	53,454,043	8,124,229	4,771,710	1,421,115	252,804,616	361,987,540
1934	1,886,070	51,972,774	53,041,964	8,285,489	4,089,342	1,592,633	255,796,072	376,664,344
1935	1,906,443	37,243,782	53,648,677	8,753,818	2,027,431	1,830,622	273,182,595	379,493,368
1936	2,023,705	29,473,360	55,640,796	8,979,155	2,734,745	1,900,411	282,512,856	373,235,863
1937	2,299,482	36,877,295	46,004,134	9,397,590	2,775,214	2,185,774	282,962,158	382,501,647

7. All Cheque-paying Banks.—(i) *General.* Particulars of the aggregate average liabilities and assets in Australia of all Cheque-paying Banks in the Commonwealth, including the Commonwealth Bank of Australia, are given in the subjoined paragraphs.

(ii) *Liabilities in Australia.* (a) *Year 1936-37.* The average liabilities in Australia of all Cheque-paying Banks for each quarter of the year 1936-37 were as follows :—

ALL CHEQUE-PAYING BANKS.—LIABILITIES, QUARTERLY AVERAGES.(c)

Quarter Ended—	Notes in Circulation.	Bills in Circulation.	Balances Due to Other Banks.(b)	Deposits.			Total Liabilities.
				Not Bearing Interest.(a)	Bearing Interest.	Total Deposits.	
	£	£	£	£	£	£	£
September, 1936	167,415	2,866,394	18,100,321	118,414,229	219,545,567	337,959,796	359,093,926
December, 1936..	167,398	3,237,878	19,188,086	128,131,095	226,738,180	348,872,275	371,466,537
March, 1937 ..	167,384	3,285,462	25,890,704	136,731,709	226,489,159	363,219,868	392,563,418
June, 1937 ..	167,360	3,056,072	26,714,420	137,922,255	236,787,625	374,709,880	404,647,732

(a) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. (b) Deposits of Other Cheque-paying Banks with Commonwealth Bank are treated in returns as "Balances due to Other Banks". (c) Excludes Commonwealth Savings Bank.

(b) *Quarters ended June, 1933 to 1937.* The next table shows the average liabilities in Australia for the quarters ended June from 1933 to 1937.

ALL CHEQUE-PAYING BANKS.—AVERAGE LIABILITIES,
QUARTERS ENDED JUNE.(a)

Quarter Ended June—	Notes in Circulation.	Bills in Circulation.	Balances due to Other Banks. (b)	Deposits.			Total Liabilities
				Not Bearing Interest.(c)	Bearing Interest.	Total.	
	£	£	£	£	£	£	£
1933 ..	180,937	3,577,297	25,259,075	95,800,228	223,975,862	319,776,090	348,793,399
1934 ..	173,590	2,693,617	39,802,946	114,227,636	224,807,500	344,635,136	386,795,289
1935 ..	169,063	2,788,702	24,935,091	119,086,856	224,262,006	343,348,862	371,241,716
1936 ..	167,447	2,974,308	18,444,318	122,582,458	221,174,769	343,757,227	365,343,300
1937 ..	167,360	3,056,072	26,714,420	137,922,255	236,787,625	374,709,880	404,617,732

(a) Excludes Commonwealth Savings Bank. (b) Deposits of Other Cheque-paying Banks with Commonwealth Bank are treated in returns as "Balances due to Other Banks". (c) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.

(iii) *Assets in Australia.* (a) Year 1936-37. Particulars of the average assets in Australia for each quarter from September, 1936, to June, 1937, are given in the following table:—

ALL CHEQUE-PAYING BANKS.—ASSETS, QUARTERLY AVERAGES.(b)

Quarter Ended—	Coin.	Bullion.	Australian Notes and Cash with Commonwealth Bank.	Government and Municipal Securities. (a)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).	Total Assets
	£	£	£	£	£	£	£	£	£
September, 1936	2,457,946	728,076	33,901,802	86,844,202	9,919,725	2,678,210	1,825,385	296,113,380	434,468,310
December, 1936..	2,130,158	734,571	31,087,115	88,132,777	10,003,607	3,045,857	1,266,198	267,556,880	438,310,000
March, 1937 ..	2,541,744	970,488	40,292,306	93,224,070	10,058,404	2,942,183	2,580,250	293,788,447	446,406,310
June, 1937 ..	2,523,560	846,533	41,040,608	89,630,060	10,196,012	2,866,532	2,215,068	294,273,060	441,566,310

(a) Includes short-term loans in Australia. Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. (b) Excludes Commonwealth Savings Bank.

(b) *Quarters ended June, 1933 to 1937.* The average assets in Australia for the quarter ended June in each of the years 1933 to 1937 were as follows:—

ALL CHEQUE-PAYING BANKS.—AVERAGE ASSETS, QUARTERS ENDED JUNE.(c)

Quarter ended June—	Coin and Bullion.	Australian Notes. (a)	Government and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances and all other Assets.	Total Assets.
	£	£	£	£	£	£	£	£
1933..	2,806,787	45,138,758	100,456,007	9,063,508	4,864,224	1,427,573	250,913,138	423,669,995
1934..	2,723,905	58,359,387	98,621,741	9,196,468	4,172,848	1,601,059	262,715,146	437,390,554
1935..	2,719,214	42,254,523	97,486,278	9,627,710	3,022,380	1,840,375	280,631,436	437,581,916
1936..	3,126,679	34,658,347	85,670,101	9,707,759	2,857,331	1,914,557	201,910,962	429,944,736
1937..	3,370,102	41,040,603	89,630,060	10,160,012	2,866,532	2,215,068	204,273,060	443,566,807

(a) Includes Cash with Commonwealth Bank. (b) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. Short term loans in Australia included. (c) Excludes Commonwealth Savings Bank.

(iv) *Cash Reserve Ratios.* The following table shows for the quarter ended June of each of the years 1928 to 1937 the percentages of cash on liabilities "at call" and "total liabilities" respectively for the Commonwealth Bank and the Other Cheque-paying Banks. These percentages relate throughout to business within Australia.

(a) *Commonwealth Bank.* Cash reserves comprise coin, bullion and Australian notes. "Call" liabilities comprise deposits not bearing interest and balances due to other banks. The latter item is assumed to be approximately equivalent to the cash with Commonwealth Bank of the Other Cheque-paying Banks which is included in their quarterly statements with Australian Notes.

In interpreting the percentages it should be noted that the Commonwealth Savings Bank was not created a separate department of the Commonwealth Bank until the 9th June, 1928. Savings Bank deposits are included in the total liabilities of the Commonwealth Bank up to this date, but, obviously, did not come into "call" liabilities.

(b) *Other Cheque-paying Banks.* Cash reserves comprise coin, bullion, Australian notes and cash with the Commonwealth Bank, while "call" liabilities include deposits not bearing interest and notes in circulation. In computing the percentages in this table particulars relating to the Rural Bank of New South Wales have been excluded.

It is not strictly correct to assume that a division of deposits with Cheque-paying Banks into those bearing interest and not bearing interest would in all cases coincide with a definite division into fixed deposits and current accounts respectively, but in the absence of the data required to permit of an accurate apportionment, such a division has been adopted for the purposes of this analysis.

CHEQUE-PAYING BANKS.—CASH RESERVE RATIOS.

Quarter Ended June—				On Liabilities "At Call."		On Total Liabilities.	
				Commonwealth Bank.	Other Cheque-paying Banks. (a)	Commonwealth Bank.	Other Cheque-paying Banks. (a)
				%	%	%	%
1928	..	..	..	19.7	47.4	6.5	18.1
1929	..	..	..	19.7	43.8	14.1	15.8
1930	..	..	..	24.4	41.9	16.7	13.5
1931	..	..	..	11.6	65.3	8.4	19.6
1932	..	..	..	18.4	56.7	10.7	17.3
1933	..	..	..	21.9	46.2	10.1	14.6
1934	..	..	..	14.2	52.5	9.1	17.4
1935	..	..	..	16.4	36.1	8.4	12.9
1936	..	..	..	21.7	28.1	10.0	10.3
1937	..	..	..	12.8	32.1	6.6	12.0

(a) Rural Bank of New South Wales excluded.

(v) *Advances, and Advances and Securities. Percentage on Total Deposits.* The percentages of advances, and of advances and securities on total deposits, respectively for the Commonwealth Bank, the Other Cheque-paying Banks, and for All Cheque-paying Banks are shown in the following table. The data on which the percentages are based relate only to business within Australia.

For the Commonwealth Bank and Other Cheque-paying Banks, "Advances" are represented by the item "Advances, discounts, overdrafts, and all other assets (not including contingent assets)," which are combined with "Government and Municipal Securities" (including short-term loans in Australia) under the heading "Advances and Securities." "Deposits" include deposits of all kinds except those of Other Cheque-paying Banks with the Commonwealth Bank, i.e., "Cash with Commonwealth Bank," "Savings Bank Deposits" with the Commonwealth Bank, and "Advances and Securities" from these deposits were included prior to the separation of the Savings Bank business from the general business of the present Banking Department on 9th June, 1928.

In computing the percentages in this table, particulars relating to the Rural Bank of New South Wales have been excluded.

CHEQUE-PAYING BANKS.—PERCENTAGE OF ADVANCES, AND ADVANCES AND SECURITIES ON TOTAL DEPOSITS.

Quarter Ended June—	Advances on Total Deposits.			Advances and Securities on Total Deposits.		
	Common- wealth Bank.	Other Cheque- paying Banks. (a)	Total. (a)	Common- wealth Bank.	Other Cheque- paying Banks. (a)	Total. (a)
	%	%	%	%	%	%
1928	23.9	81.1	71.6	105.3	89.5	94.1
1929	52.8	86.9	83.9	101.9	95.1	95.7
1930	59.6	98.2	95.0	151.3	105.5	109.4
1931	56.5	92.8	89.9	228.7	101.1	111.3
1932	33.5	82.7	77.3	137.3	98.1	102.4
1933	18.0	85.3	77.0	137.2	104.1	108.2
1934	16.9	79.9	72.4	128.2	97.2	100.9
1935	16.4	87.1	77.8	113.2	104.7	105.8
1936	20.6	90.2	80.9	108.3	105.2	105.6
1937	20.9	83.8	74.6	101.4	97.8	98.3

(a) Rural Bank of New South Wales excluded.

(vi) *Deposits per head of Population.* Particulars of the average deposits per head of population, calculated on the mean population of the quarter, are given for the quarter ended June of each of the last five years in the following table. The figures given, which are based on the aggregate for all Cheque-paying Banks in each State, are not adjusted on account of the Government "set-off" accounts of the Commonwealth Bank.

ALL CHEQUE-PAYING BANKS.—DEPOSITS PER HEAD OF POPULATION.

Quarter Ended June—	New South Wales. (a)	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Total.
	£	£	£	£	£	£	£	£
1933 ..	48.8	63.2	47.1	42.7	35.5	35.4	28.8	48.8
1934 ..	46.9	69.1	46.2	44.3	39.8	36.4	31.5	51.8
1935 ..	47.5	65.7	46.2	43.8	42.3	36.3	32.9	51.1
1936 ..	47.5	65.6	45.9	44.6	43.2	36.5	33.1	51.3
1937 ..	52.3	70.5	47.7	49.1	44.7	38.0	36.8	55.3

(a) Includes Federal Capital Territory.

It may be mentioned here that deposits of "other Cheque-paying Banks" with the Commonwealth Bank are treated in the returns as "balances due to Other Banks."

(vii) *Proportion of Non-Interest Bearing Deposits to Total Deposits.* The sub-joined table shows for each State the proportion of non-interest bearing deposits to the total deposits with all Cheque-paying Banks during the quarter ended June of each of the years 1933 to 1937. Government "set-off" accounts of the Commonwealth Bank have been deducted in arriving at the percentage for all States combined.

ALL CHEQUE-PAYING BANKS.—PROPORTION OF NON-INTEREST BEARING DEPOSITS TO TOTAL DEPOSITS.

Quarter ended June—	New South Wales. (a)	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Total.
	%	%	%	%	%	%	%	%
1933 ..	34.8	26.9	32.3	23.9	37.3	29.9	46.1	30.0
1934 ..	38.6	28.4	37.7	24.8	37.6	33.1	54.3	33.0
1935 ..	40.1	29.1	38.7	26.1	39.3	35.5	61.7	34.7
1936 ..	40.6	32.1	39.1	27.9	38.3	39.1	63.2	35.7
1937 ..	41.6	32.8	39.3	29.2	41.7	38.4	67.2	36.8

(a) Includes Federal Capital Territory.

8. **Deposit Rates.**—Particulars of interest rates for deposits since 1920 are given hereunder. It should be mentioned that the rates allowed by the Commonwealth Bank have not always been the same as those given by the other trading banks.

BANK DEPOSIT RATES.

Deposits for—

Periods during which rates were in force.

	Three Months.	Six Months.	Twelve Months.	Two Years.
	Per cent. per annum.	Per cent. per annum.	Per cent. per annum.	Per cent. per annum.
24th July, 1920 to 18th August, 1927..	3½	4	4½	5
19th August, 1927 to 27th January, 1930	4	4	4½	5
28th January, 1930 to 25th June, 1931	4½	4½	5	5½
26th June to 26th November, 1931 ..	3½	3½	4	4½
27th November, 1931 to 7th March, 1932	3	3½	3½	4
8th March to May-June, 1932 (a) ..	2½	3	3½	4
May-June (a) to 31st October, 1932 (b)	2½	3	3½	3½
1st November, 1932 to 6th February, 1933 ..	2½	2½	3	3½
7th February, 1933 to 11th April, 1934	2	2½	2½	3
12th April to 8th August, 1934 ..	2	2½	2½	2½
9th August to 10th October, 1934 ..	1½	2½	2½	2½
11th October to 16th December, 1934	1½	2	2½	2½
17th December, 1934 to 23rd March, 1936 (c) ..	1	1½	2½	2½
24th March, 1936 (d) ..	2	2½	2½	3

(a) All Banks did not take simultaneous action. (b) Bank of New South Wales reduced the rates for 6, 12 and 24 months terms by one quarter of 1 per cent. from 23rd August, 1932. (c) Commonwealth Bank only. (d) Bank of New South Wales from 2nd March and Bank of Adelaide from 3rd March.

The "Premiers' Plan" included, *inter alia*, provisions for the reduction of bank interest rates for deposits and advances and the steps taken in this direction are referred to in the Appendix to this volume.

9. **Clearing House Returns.**—(i) *Annual Clearings.* Particulars of the aggregate bank clearings for each capital city, as furnished by the Associated Banks, Melbourne, are given in the following table. Since October, 1929, transactions connected with the issue and redemption of Treasury Bills have resulted in largely inflated clearings. These transactions are of an abnormal character, and for the years 1932 to 1936 are shown separately. A weekly average of bank clearings is compiled from information supplied by the Commonwealth Bank, Sydney, and published in the Quarterly Summary of Australian Statistics.

CLEARING HOUSE RETURNS.—VALUE OF BILLS, CHEQUES, ETC., 1870 TO 1936.

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1870 (a) ..	..	64,532	..	..	..	..	64,532
1880 (a) ..	..	85,877	..	..	..	..	85,877
1890 ..	..	315,190	..	..	..	..	315,190
1895 ..	108,509	130,787	..	..	..	..	239,296
1900 ..	144,080	159,949	..	..	..	..	304,029
1905 ..	189,826	187,632	32,255	..	..	..	409,713
1910 ..	274,344	261,383	61,060	..	..	..	596,787
1915 ..	357,803	299,295	96,291	60,950	..	..	814,339
1920 ..	764,546	725,006	160,539	166,011	80,758	..	1,896,860
1925 ..	909,114	803,083	192,968	171,092	101,085	25,557	2,202,899
1927 ..	1,034,894	825,676	192,274	186,752	111,454	26,805	2,377,855
1928 ..	1,033,511	762,851	196,566	164,166	112,503	28,226	2,297,823
1929 ..	1,043,320	681,210	196,253	156,686	114,587	27,365	2,235,016
1930 ..	687,390	669,641	167,999	125,684	89,034	23,092	1,755,840
1931 ..	663,176	566,865	144,814	96,867	71,356	18,057	1,581,135
1932— Ordinary Trans- actions ..	588,733	592,356	141,511	106,865	75,678	19,259	1,524,402
Treasury Bills Transactions	143,908	63,791	..	..	..	..	207,699
Total ..	732,641	656,147	141,511	106,865	75,678	19,259	1,732,101
1933— Ordinary Trans- actions ..	641,400	619,230	148,335	112,250	79,689	19,864	1,620,768
Treasury Bills Transactions	251,477	60,733	..	..	..	..	312,210
Total ..	892,877	679,963	148,335	112,250	79,689	19,864	1,932,978
1934— Ordinary Trans- actions ..	716,084	676,407	165,555	118,656	84,628	22,463	1,783,793
Treasury Bills Transactions	256,013	55,520	..	..	..	..	311,533
Total ..	972,097	731,927	165,555	118,656	84,628	22,463	2,095,326
1935— Ordinary Trans- actions ..	775,986	724,327	181,889	132,689	94,705	24,713	1,934,309
Treasury Bills Transactions	247,683	52,369	..	..	..	..	300,052
Total ..	1,023,669	776,696	181,889	132,689	94,705	24,713	2,234,361
1936— Ordinary Trans- actions ..	842,610	755,196	188,906	139,959	101,880	27,665	2,056,216
Treasury Bills Transactions	250,829	43,176	..	..	..	..	294,005
Total ..	1,093,439	798,372	188,906	139,959	101,880	27,665	2,350,221

(a) Figures now published for these years exclude payments in coin transactions.

(b) Excludes Treasury Bills

(ii) *Index of Annual Clearings.* The following index of bank clearings in each capital city for the years 1927 to 1936 has been computed from the figures in the previous paragraph. The base used is the average of the years 1927 to 1929. Clearings connected with the issue and redemption of Treasury Bills have been disregarded and no adjustment has been made on account of amalgamations of banking interests.

INDEX OF BANK CLEARINGS, 1927 TO 1936.

(Base: Average of Years 1927 to 1929 = 1,000.)

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
1927-29 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1927 ..	998	1,032	986	1,104	988	976	1,015
1928 ..	996	953	1,008	970	997	1,028	981
1929 ..	1,006	1,015	1,006	926	1,015	996	1,004
1930 ..	841	872	861	743	789	841	844
1931 ..	659	708	743	572	632	657	675
1932 ..	568	740	726	632	671	701	651
1933 ..	618	774	761	663	706	723	692
1934 ..	690	845	849	701	750	818	762
1935 ..	748	905	933	784	839	900	826
1936 ..	812	944	969	827	903	1,007	878

10. *Rates of Exchange.*—(i) *Australia on London.* The following statement, which has been prepared from data very kindly supplied by the General Manager of the Bank of New South Wales, Sydney, gives particulars of the various rates of exchange, Australia on London, in operation since 20th April, 1927. In several immediately preceding issues were given particulars of the rates in operation since 16th October, 1913. The details given show the value in Australia of £100 in London according to the rates quoted by the Associated Banks for buying and selling £100 in London on telegraphic transfer. In December, 1931, the Commonwealth Bank Board undertook the responsibility of regulating sterling exchange and announcing rates each week.

EXCHANGE RATES.—AUSTRALIA ON LONDON, TELEGRAPHIC TRANSFER,
FROM 20th APRIL, 1927.

Date on which Rate began to Operate.	Exchange.				Commission for £100 (Sterling).
	London.	Australia (Mean of Buying and Selling Rates).			
	£ sterling	£	s.	d.	s. d.
20th April, 1927	100	100	plus	0 6 3	3 9
27th June, 1927..	0 8 9	3 9
8th July, 1927	0 11 3	3 9
19th March, 1928	0 15 0	5 0
22nd July, 1929	1 0 0	5 0
3rd September, 1929	1 5 0	5 0
10th October, 1929	1 10 0	5 0
18th December, 1929	1 17 6	5 0
28th January, 1930	2 6 3	6 3
17th February, 1930	2 16 3	6 3
16th March, 1930	3 16 3	6 3
24th March, 1930	6 6 3	3 9
9th October, 1930	8 15 0	5 0
6th January, 1931	15 6 3	3 9
13th January, 1931	18 3 9	3 9
17th January, 1931	25 5 0	5 0
20th January, 1931	30 5 0	5 0
3rd December, 1931	25 5 0	5 0

The "Commission" which represents the Banks' "turn" on each £100 sterling exchanged has been computed by taking half the difference between the buying and selling rates.

(ii) *Sterling-Dollar rates.* The average of the daily quotations of the London-New York exchange rates are given for each month from January, 1932 to September, 1937, in the subjoined table.

STERLING-DOLLAR RATES.—AVERAGE RATE FOR EACH MONTH.

Month.	1932.	1933.	1934.	1935.	1936.	1937.
	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.	\$ to £ Stg.
January ..	3.430	3.372	5.056	4.895	4.960	4.908
February ..	3.459	3.422	5.019	4.875	4.996	4.894
March ..	3.634	3.436	5.089	4.776	4.971	4.885
April ..	3.752	3.587	5.154	4.835	4.944	4.916
May ..	3.676	3.933	5.105	4.890	4.971	4.939
June ..	3.649	4.141	5.059	4.936	5.020	4.935
July ..	3.552	4.643	5.042	4.956	5.023	4.967
August ..	3.476	4.503	5.067	4.971	5.027	4.983
September ..	3.471	4.660	4.996	4.933	5.041	4.954
October ..	3.399	4.668	4.942	4.908	4.900	
November ..	3.277	5.136	4.990	4.925	4.888	
December ..	3.276	5.118	4.946	4.929	4.907	

(iii) *Interstate.* Exchange rates between the several capital cities of the States at 30th June, 1936, were as follows:—

INTERSTATE EXCHANGE RATES, 30TH JUNE, 1936.

Between.	And—					
	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart and Launceston.
	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.
Sydney ..	..	2 6	2 6	5 0	10 0	5 0
Melbourne ..	2 6	..	7 6	2 6	7 6	5 0
Brisbane ..	2 6	7 6	..	10 0	12 6	10 0
Adelaide ..	5 0	2 6	10 0	..	5 0	7 6
Perth ..	10 0	7 6	12 6	5 0	..	12 6
Hobart and Launceston ..	5 0	5 0	10 0	7 6	12 6	..

§ 2. Savings Banks.

1. *General.*—The inauguration of Savings Banks in Australia dates from the year 1819, when a private Savings Bank was opened in Sydney, New South Wales. In 1832 the legislature created "the Savings Bank of New South Wales" under the control of trustees, and shortly after its establishment the funds of the private Savings Bank were transferred to the new institution. In the other States provision for placing deposits with Savings Banks dates from 1841 in Victoria; 1854 in Queensland; 1840 in South Australia; 1863 in Western Australia (a Savings Bank was opened in 1856 but was closed a year later); 1835 in Launceston; and 1845 in Hobart. These early banks functioned as trustee Savings Banks, but, with the exception of the Hobart and Launceston institutions, were later absorbed by or amalgamated with Government Savings Banks.

Post Office Savings Banks were established in all States except South Australia dating from 1863 onwards. After the Federation of the Australian States in 1900 Post Offices were controlled by the Commonwealth Government, but they continued to act as Savings Bank agencies for State institutions until the establishment of the Commonwealth Bank in 1912, when they acted as agents for that institution.

Savings Banks at present operating are the Commonwealth Savings Bank (all States); State Savings Bank of Victoria; State Savings Bank of South Australia; and the two trustee Banks—Hobart and Launceston.

2. **The Commonwealth Savings Bank.**—The Commonwealth Savings Bank opened for business in Victoria on the 15th July, 1912; in Queensland on the 16th September, 1912; in the Northern Territory on the 21st October, 1912; and in New South Wales, South Australia and Western Australia on the 13th January, 1913. The Tasmanian State Savings Bank was absorbed by the Commonwealth Bank in January, 1913, the Queensland State Savings Bank was taken over in 1920 and the New South Wales and Western Australian State Savings Banks in 1931. The Savings Bank Department was separated from the General Bank on 9th June, 1928, and has since then operated independently, publishing its own balance-sheets and profit and loss accounts.

3. **Recent Amalgamations.**—Particulars relating to the absorption by the Commonwealth Savings Bank of the Government Savings Banks of New South Wales and the State Savings Bank of Western Australia were given in the previous issue of this work.

4. **Extension of Facilities.**—The prime object of the foundation of Savings Banks in Australia was the encouragement of thrift—deposits of one shilling and upwards being accepted—nevertheless the facilities offered, while preserving the original object, have led to developments in another direction. Although depositors may not operate on their accounts by means of cheques, they have practically all the other advantages of a current account in addition to receiving interest on their minimum monthly balances, while no charge is made by the banks for keeping the accounts.

For many years considerable use has been made of the Savings Bank account as an alternative to maintaining a fixed deposit with a Cheque-paying Bank. Deposits in Savings Banks may be withdrawn at any time with a minimum loss of interest, the rate of which is in some States greater than that offered by trading banks for six months' deposits.

5. **Classification of Depositors' Balances.**—The classification of deposits published by Savings Banks does not permit of a fully detailed analysis with respect to Australia as a whole, but information supplied to the Royal Commission on Monetary and Banking Systems for all Savings Banks except the Hobart Trustee Savings Bank shows that at 30th June, 1930, the amount on deposit in accounts with balances of less than £100 represented 21 per cent. of the total deposits; balances of over £100 but under £250, 21 per cent.; over £250 but under £500, 23 per cent.; over £500 but under £1,000, 25 per cent.; while those of over £1,000 accounted for 10 per cent. School, Penny Bank and small inoperative accounts were excluded in determining the above percentages.

6. **Number of Accounts.**—No statement is shown herein regarding the number of accounts because in some States it is possible for the same person to have an account in the Commonwealth Savings Bank as well as in the State Savings Bank. The effect of this multiplication of accounts was demonstrated by the reduction of numbers which followed the amalgamations referred to in par. 3 *ante*.

7. **Rates of Interest on Deposits.**—The "Premiers Plan" of 1931, which is dealt with in the Appendix to this volume, provided, *inter alia*, for the reduction of bank rates of interest on deposits and advances. The Commonwealth Savings Bank reduced the rate of interest on depositors' balances by one per cent. from 1st July, 1931, and the other Savings Banks subsequently took similar action. The statements given hereunder show the rates of interest allowed at intervals since 1931 by State or Trustee Banks and by the Commonwealth Bank.

The table hereunder refers to interest rates allowed by State Savings Banks:—

STATE AND TRUSTEE SAVINGS BANKS.—INTEREST RATES ON DEPOSITS.

Particulars.	State Savings Bank.			Trustee Savings Banks.	
	Victoria.	South Australia. (a)		Hobart.	Launceston.
	£1,000.				
Interest-bearing Limit.	£1,000.	£1 to £500.	£501 to £1,000.	£300.	£300.
	%	%	%	%	%
Rates at 30th June—					
1931	4; 4½ (b)	4½	4½	4½; 5 (c)	4½
1932	3; 3½ (b)	3½	3½	3; 4 (c)	3½; 4 (c)
1933	2½; 3 (b)	3	3	2½; 3 (c)	2½; 3 (c)
1934	2¼; 3 (b)	3	2½	2½; 3 (c)	2½; 3 (c)
1935	2; 2½ (b)	2½	2½	2½; 3 (c)	2½; 3 (c)
1936	2; 2½ (b)	2½	2½	2½; 3 (c)	2½; 3 (c)
1937	2; 2½ (b)	2½	2½	3; 3½ (c)	3; 3½ (c)

(a) Interest on deposits in accounts closed during the year is generally allotted at a lower rate than that applicable to accounts remaining open. (b) Deposit stock. (c) Deposits fixed for twelve months.

Particulars regarding the rates allowed by the Commonwealth Savings Bank are incorporated in the following table:—

COMMONWEALTH SAVINGS BANK.—INTEREST RATES ON DEPOSITS.

Rate at 30th June—	New South Wales, Victoria, South Australia, Western Australia and Tasmania.			Queensland.	
	£1 to £500.	£501 to £1,000.	£1,001 to £1,300.	£1 to £500.	£501 to £2,000.
	%	%	%	%	%
1931	4	3½	3	4	3½
1932	3	2½	2	3	2½
1933	2½	2	2	2½	2
1934	2¼	1¾	1¾	2¼	1¾
1935	2	1¾	1¾	2	1¾
1936	2	1¾	1¾	2	1¾
1937	2	1¾	1¾	2	1¾

(a) Interest bearing limit in all States except Queensland is £1,300. In Queensland it is £2,000. Interest is allowed by the Commonwealth Savings Bank at the rate shown under £1 to £500 on the first £500 of any deposit and at the rates shown under £501 to £1,000 on the second £500, etc.

On 1st July, 1932, a reduction of one-quarter of one per cent. in the rate of interest allowed on deposits became effective, followed by a similar reduction from 1st November, 1932. Further reductions of one-quarter of 1 per cent. operated from 1st June, 1934, and 1st January, 1935, respectively.

8. Statistical Returns.—Commencing from July, 1931, monthly returns have been furnished by Savings Bank authorities, and the collated data are disseminated in the form of monthly press notices. In addition, the particulars are published in the Quarterly Summary of Australian Statistics issued by the Commonwealth Statistician. The information given in the following paragraphs relates to the deposits at the 30th June

in each year. For convenience of reference the information has been grouped under the following headings:—

- (i) All Savings Banks;
- (ii) Commonwealth Savings Banks; and
- (iii) State (including Trustee Banks in Tasmania) Savings Banks.

9. All Savings Banks.—(i) *Returns for Year 1935-36.* The following statement gives details of the business transacted by all Savings Banks for the year 1935-36.

ALL SAVINGS BANKS.—PARTICULARS, 1935-36.

State or Territory.	Amount on Deposit at 30th June, 1935.	Excess of Deposits over Withdrawals during year 1935-36.	Interest Added during year 1935-36.	Amount on Deposit at 30th June, 1936.
	£	£	£	£
New South Wales ..	77,906,402	622,920	1,470,626	79,999,948
Victoria ..	72,018,713	486,425	1,384,982	73,890,120
Queensland ..	26,196,599	433,133	501,927	27,131,659
South Australia ..	24,184,988	496,731	626,867	25,308,586
Western Australia ..	10,929,010	380,606	207,604	11,517,220
Tasmania ..	6,429,914	231,762	156,624	6,818,300
Northern Territory ..	53,541	3,069	1,090	57,700
Federal Capital Territory	229,896	4,557	4,232	238,685
Total ..	217,949,063	2,659,203	4,353,952	224,962,218

(ii) *Deposits—(a) Years 1933 to 1937.* The table hereunder shows for all Savings Banks the amount at credit of depositors and the average deposits per head of population at 30th June, 1933 to 1937.

ALL SAVINGS BANKS.—DEPOSITS.

30th June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	Fed. Cap. Ter.	All States.
TOTAL.									
	£	£	£	£	£	£	£	£	£
1933	72,307,685	67,813,543	23,453,017	22,515,288	10,064,464	5,864,807	38,411	225,054	202,282,260
1934	75,714,070	69,971,411	24,334,273	23,437,596	10,398,972	6,039,128	44,251	230,439	210,976,047
1935	77,906,402	72,018,713	26,196,599	24,184,988	10,929,010	6,429,914	53,541	229,896	217,949,063
1936	79,999,948	73,890,120	27,131,659	25,308,586	11,517,220	6,818,300	57,700	238,685	224,962,218
1937	81,952,399	75,720,458	27,304,438	26,505,941	11,834,794	7,214,877	59,127	259,127	230,851,161
PER HEAD OF POPULATION.									
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1933	27 16 0	37 5 1	24 14 11	38 15 1	22 18 7	25 15 4	7 18 1	25 3 1	30 10 2
1934	28 17 7	33 4 10	25 18 6	40 3 7	23 10 5	26 9 10	8 19 10	25 8 10	31 11 0
1935	29 9 2	39 3 8	27 1 3	41 7 1	24 10 5	28 2 3	10 9 6	24 15 2	32 8 3
1936	30 0 3	40 0 2	27 13 3	43 1 10	25 11 7	29 14 1	10 17 2	24 8 1	33 4 1
1937	30 8 9	40 16 1	27 10 5	45 0 6	26 1 1	31 1 2	10 16 10	25 4 4	33 15 10

For a number of years prior to the depression deposits were steadily rising and at 30th September, 1929, the aggregate amount was £225,063,165. As the depression developed withdrawals were heavy and the amount on deposit declined to £193,375,397 in June, 1931. (The lowest point, although not actually recorded, was probably reached in May, 1931). During the next twelve months the deposits rose to £197,966,307, and they have since risen year by year until the maximum level of £230,851,161 was recorded at 30th June, 1937.

(b) *Deposits per head and Purchasing Power.* Particulars of the deposits per head of population, actual and adjusted to purchasing power (in terms of food and housing) at 30th June in each year from 1927 to 1937, are given in the following table:—

ALL SAVINGS BANKS.—DEPOSITS PER HEAD OF POPULATION.

At 30th June—				Actual.		Adjusted to Purchasing Power. (a)	
				£	Index Number.	£	Index Number.
				1928 = 1000		1928 = 1000	
1927	..	..	..	33.09	969	33.80	990
1928	..	..	..	34.14	1000	34.14	1000
1929	..	..	..	35.26	1033	34.67	1016
1930	..	..	..	33.65	986	34.30	1005
1931	..	..	..	29.63	868	34.10	999
1932	..	..	..	30.10	882	36.48	1069
1933	..	..	..	30.51	894	38.52	1128
1934	..	..	..	31.55	924	39.14	1146
1935	..	..	..	32.41	949	39.77	1165
1936	..	..	..	33.20	972	40.00	1172
1937	..	..	..	33.79	990	39.52	1158

(a) On the basis of the "C" Series of Retail Price Index-numbers. Averages for June quarter in each year.

Since 1921 deposits per head increased by roughly 3 per cent. per annum until they reached a maximum of £35.26 in 1929. The figure declined sharply in the next two years, but rose by annual increments thereafter to £33.79 in 1937, which represents an increase of 20 per cent. on the 1921 figure. When deposits are adjusted to purchasing power a more favourable position is disclosed. From 1927 to 1936 a steady increase was recorded in the purchasing power of deposits and the 1937 level, although showing a slight decrease on the 1936 figure, represents a gain of 17 per cent. in the ten years.

In interpreting the above figures it should be remembered that Savings Bank accounts are used to some extent by institutions and business people, as well as by individuals, for the investment of personal savings. The relative extent to which Savings Bank accounts are used for business purposes, etc., may, and probably does, fluctuate considerably from time to time.

10. *Commonwealth Savings Bank.*—(i) *Returns for Year 1935-36.* Returns for the States and Territories for the year 1935-36 have been incorporated in the table below.

COMMONWEALTH SAVINGS BANK.—RETURNS, 1935-36.

State or Territory.	Amount on Deposit at 30th June, 1935.	Excess of Deposits over Withdrawals during year 1935-36.	Interest Added during year 1935-36.	Amount on Deposit at 30th June, 1936.
	£	£	£	£
New South Wales ..	77,906,402	622,920	1,470,626	79,999,948
Victoria ..	8,910,707	408,076	168,535	9,487,318
Queensland ..	26,196,599	433,133	501,927	27,131,659
South Australia ..	2,508,233	146,010	48,179	2,702,422
Western Australia ..	10,929,010	380,606	207,604	11,517,220
Tasmania ..	1,854,283	91,292	35,515	1,981,090
Northern Territory ..	53,541	3,069	1,090	57,700
Federal Capital Territory	229,896	4,557	4,232	238,685
Total ..	128,588,671	2,089,663	2,437,708	133,116,042

(ii) *Deposits—Years 1933 to 1937.* The amount on deposit with the Commonwealth Savings Bank in each State, in the Territories of Papua and New Guinea, and in London, at the 30th June in each of the years 1933 to 1937 was as follows:—

COMMONWEALTH SAVINGS BANK.—DEPOSITS.

Place of Deposit.	At 30th June—				
	1933.	1934.	1935.	1936.	1937.
	£	£	£	£	£
New South Wales	72,397,685	75,714,070	77,906,102	79,999,948	81,952,399
Victoria	7,587,472	8,361,264	8,910,707	9,487,318	9,965,266
Queensland	23,453,017	24,834,273	26,196,599	27,131,659	27,304,438
South Australia	2,204,022	2,304,751	2,508,233	2,702,422	2,917,184
Western Australia	10,064,464	10,308,072	10,929,010	11,517,220	11,834,794
Tasmania	1,645,053	1,714,882	1,854,283	1,981,090	2,123,853
Northern Territory	38,411	44,251	53,541	57,700	59,127
Federal Capital Territory ..	225,054	236,136	229,896	238,685	259,127
Total	117,525,178	123,608,899	128,588,671	133,116,042	136,416,188
Papua and New Guinea (a) ..	135,749	145,900	162,646	181,048	189,251
London (a)	282,554	310,579	381,622	534,764	526,653
Grand Total	117,943,481	124,065,378	129,132,939	133,831,854	137,132,092

(a) Not included in the figures given in pars. 9 (i) and (ii) and 10 (i).

(iii) *Balance-sheet, 30th June, 1936.* The Commonwealth Savings Bank publishes a half-yearly balance-sheet, and the statement hereunder shows the position at the 30th June, 1936.

COMMONWEALTH SAVINGS BANK.(a)—BALANCE-SHEET, 30TH JUNE, 1936.

Liabilities.	Assets.
£	£
Reserve Fund	Coin, Cash Balances and Money
Depositors' Balances	at Short Call
Other Liabilities	Australian Notes
	Government Securities
	Securities of Municipal and
	Other Public Authorities
	Bank Premises
	Other Assets
141,594,873	141,594,873

(a) Includes London, Papua and Territory of New Guinea Branches.

(iv) *Profits.* Under the terms of the Savings Bank Amalgamation Agreements the profits of the Commonwealth Savings Bank in New South Wales, Queensland, Western Australia and Tasmania are equally divided between the Bank and the former controlling authorities in those States. After £228,630 had been so provided for, the net profit of the Commonwealth Savings Bank during 1935-36 was £334,720, one-half of which was paid to the National Debt Sinking Fund and the remainder carried to reserves. The aggregate net profit from the inception of the bank to the 30th June, 1936, was £3,978,570.

II. *State Savings Banks.*—(i) *Returns for 1935-36.* Particulars of the transactions of all State Savings Banks for the year 1935-36 are given hereunder. Throughout the following tables the figures for Tasmania refer to the Trustee Savings Banks in Hobart and Launceston. Although the accounts of these institutions are made up for half-yearly periods ending 28th February and 31st August, the managements have furnished particulars of deposits at 30th June from 1929 onwards.

STATE SAVINGS BANKS.—RETURNS, 1935-36.

State or Territory.	Amount on Deposit at 30th June, 1935.	Excess of Deposits over Withdrawals during year 1935-36.	Interest Added during year 1935-36.	Amount on Deposit at 30th June, 1936.
	£	£	£	£
Victoria	63,108,006	78,349	1,216,447	64,402,802
South Australia ..	21,676,755	350,721	578,688	22,606,164
Tasmania (a) ..	4,575,631	140,470	121,109	4,837,210
Total	89,360,392	569,540	1,916,244	91,846,176

(a) Trustee Savings Banks, Hobart and Launceston.

NOTE.—The State Savings Banks in New South Wales, Queensland, Western Australia and Tasmania have been absorbed by the Commonwealth Savings Bank.

(ii) *Deposits—Years 1932 to 1937.* The following statement shows the amount on deposit with State Savings Banks at the 30th June in each of the years 1932 to 1937.

STATE SAVINGS BANKS.—DEPOSITS.

State or Territory.	At 30th June—					
	1932.	1933.	1934.	1935.	1936	1937.
	£	£	£	£	£	£
Victoria	58,581,403	60,226,071	61,610,147	63,108,006	64,402,802	65,755,192
South Australia ..	19,439,537	20,311,266	21,132,755	21,076,755	22,606,164	23,588,757
Tasmania (a) ..	4,004,902	4,219,754	4,324,240	4,575,631	4,837,210	5,091,024
Total	82,025,842	84,757,091	87,067,148	89,360,392	91,846,176	94,434,973

(a) Trustee Savings Banks, Hobart and Launceston.

(iii) *Assets.* At 30th June, 1936, the assets of all State Savings Banks amounted to £99,683,070, distributed as shown hereunder.

STATE SAVINGS BANKS.—ASSETS, 30TH JUNE, 1936.

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
	£	£	£	£
Government Securities	29,497,993	12,319,978	2,225,406	44,043,377
Municipal Securities	1,630,338	313,775	401,511	2,405,624
Other Public Securities	15,310,071	197,989	25,393	15,510,053
Mortgages	1,681,954	5,533,291	1,153,858	8,369,103
Outstanding Interest, Dividends and Rents	607,565	245,486	48,531	901,582
War Service Homes	15,616	..	..	15,616
Landed and House Property ..	973,654	99,979	11,500	1,085,133
Fixed Deposits	16,948,000	4,009,500	735,000	21,692,500
Cash in hand, in transit and on Current Account	3,075,840	1,877,201	670,140	5,623,181
All other Assets	4,798	491	1,612	6,901
Total Assets	69,752,429	24,597,690	5,332,951	99,683,070

(a) Year ended 31st August, 1936. See par. (i).

(iv) *Profit and Loss Accounts, 1935-36.* Details of the Profit and Loss Accounts of the several State Savings Banks for the year 1935-36 are given in the following table:—

**STATE SAVINGS BANKS.—PROFIT AND LOSS ACCOUNTS FOR YEAR
ENDED 30TH JUNE, 1936.**

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
<i>Dr.</i>	£	£	£	£
Interest allotted to Depositors ..	1,216,447	578,688	125,380	1,920,515
Amount carried to Reserves and Depreciation Funds ..	..	133,011	17,500	150,511
Writing off Bank Premises ..	33,900	..	500	34,400
Expenses of Management ..	532,028	128,471	31,531	692,030
All other Expenses ..	(c) 249,666	20,309	(d) 1,446	271,421
Balance carried forward..	148,743	(b) 138,891	90,688	378,322
 Total	 2,180,784	 999,370	 267,045	 3,447,199
<i>Cr.</i>				
Balance brought forward ..	148,255	(e) 137,787	86,869	372,911
Interest, Dividends and Rents ..	2,032,529	861,583	180,176	3,074,288
 Total	 2,180,784	 999,370	 267,045	 3,447,199

(a) Year ended 31st August, 1936; see par. (i). (b) Includes £40,000, provision for interest accrued on Depositors' Balances from 7th to 30th June, 1936. (c) Includes £205,500 to Interest Fluctuation Account. (d) Includes £500, Taxation Reserve. (e) Includes Reserve brought forward from 1934-35 (Provision for Interest accrued on Depositors' Balances from 7th to 30th June, 1935, £40,000).

C. COMPANIES.

§ 1. General.

Statistics available in regard to registered companies embrace (a) Returns relating to Trustees, Executors and Agency Companies; (b) Returns relating to Registered Building and Investment Societies; and (c) Returns relating to Registered Co-operative Societies.

§ 2. Trustees, Executors and Agency Companies.

Returns for 1936 are available for eight Victorian, two New South Wales, one Queensland, four South Australian, two Western Australian and four Tasmanian companies. The paid-up capital of these twenty-one companies amounted to £1,355,952; reserve funds and undivided profits to £1,135,095; other liabilities, £430,242; total liabilities, including capital, £2,921,289. Among the assets are included: Deposits with Governments, £229,813; other investments in public securities, fixed deposits, etc., £682,041; loans on mortgage, £506,260; property owned, £1,060,940; advances to clients, £200,281; cash, £84,914; other assets, £157,040. Of the twenty-one companies, ten show the total amount of the estates, etc., under administration, the total for 1936 being approximately £151.4 millions. (The report of the Royal Commission on Monetary and Banking Systems shows the total value of estates administered by all companies as approximately £220 millions.) In respect of the twenty-one companies, net profits for the year totalled £149,631, of which £106,407 was paid in dividends.

§ 3. Registered Building and Investment Societies.

1. **Summary.**—Returns have been received relating to 196 Societies, but the information is not exhaustive, as particulars regarding unimportant organizations are not included.

REGISTERED BUILDING AND INVESTMENT SOCIETIES.—SUMMARY, 1935.

Particulars.	N.S.W. 1934-35.	Vic. 1934-35.	Q'land. 1934-35.	S. Aust. 1935.	W. Aust. 1934-35.	Tas. 1935.	Total.
Societies making returns—							
Permanent .. No.	10	21	5	6	6	4	52
Terminating .. No.	109	4	11	14	6	..	144
Total .. No.	119	25	16	20	12	4	196
Number of shareholders ..	(d) 23,545	9,279	9,483	9,617	21,035	4,490	77,509
Number of shares ..	(c) 194,798	(a) 2,380,222	34,381	(n) 43,957	62,653,358		
Number of borrowers ..	(e) 4,335	11,034	6,363	2,617	3,550	1,450	29,349
Income for year from interest .. £	138,083	283,124	100,551	16,048	58,672	38,023	634,501
Working expenses for year .. £	78,118	151,987	13,039	10,167	14,235	6,227	274,373
Amount of deposits during year .. £	343,470	1,275,082	130,643	102,010	255,024	6,750	2,112,979
Repayment of loans during year .. £	536,627	840,826	348,738	78,387	270,293	98,207	2,182,078
Loans granted during year .. £	443,725	722,281	263,816	63,046	252,187	55,279	1,800,334

(a) Not available. (b) Exclusive of Victoria and Western Australia. (c) Includes 168,093 shares in Star Bowkett and terminating societies and excludes investment societies. (d) Includes 21,109 shareholders in Star Bowkett Societies and excludes four terminating societies. (e) Permanent Societies only.

2. **Liabilities and Assets.**—The balance-sheets of the companies in respect of which particulars of liabilities and assets are stated hereunder cover periods ended during the year 1935. The figures quoted for the States of South Australia and Tasmania refer to the calendar year 1935, while those for the remaining States are for the fiscal year 1934-35.

REGISTERED BUILDING AND INVESTMENT SOCIETIES.—LIABILITIES, 1935.

State.	Paid-up Capital or Subscriptions.	Reserve Funds. (a)	Deposits.	Bank Overdrafts and other Liabilities.	Total Liabilities.
	£	£	£	£	£
New South Wales(b) ..	2,320,271	643,070	544,251	65,953	3,573,545
Victoria ..	1,095,708	852,080	1,505,053	255,401	4,009,211
Queensland ..	1,550,418	50,334	15,474	61,440	1,677,672
South Australia ..	573,050	60,230	83,040	7,705	725,537
Western Australia ..	1,037,794	49,777	70,744	13,719	1,178,034
Tasmania ..	330,854	104,598	245,903	5,886	687,241
Total ..	7,808,695	1,760,104	2,532,271	410,170	12,511,240

(a) Includes Profit and Loss Account.

(b) Excludes four terminating Societies.

REGISTERED BUILDING AND INVESTMENT SOCIETIES.—ASSETS, 1935.

State.	Advances on Mortgage.	Landed and House Property, Furniture, etc.	Cash in Hand and on Deposit and other Assets.	Total Assets.
	£	£	£	£
New South Wales(c)	2,907,491	(a) 217,843	(b) 448,211	3,573,545
Victoria	4,025,968	298,896	344,347	4,669,211
Queensland	1,606,493	17,349	53,830	1,677,672
South Australia	659,226	29,963	36,348	725,537
Western Australia	1,097,644	50,232	30,158	1,178,034
Tasmania	538,981	10,150	138,110	687,241
Total	10,835,803	624,433	1,051,004	12,511,240

(a) Permanent Societies only.

(b) Includes Landed and House Property, Furniture, etc., of terminating Societies.

(c) Excludes four terminating Societies.

§ 4. Co-operative Societies.

1. General.—Prior to 1931 the returns relating to Co-operative Societies were divided into two classes—(i) those engaged in the manufacture and marketing of primary products and trade requirements; and (ii) those engaged in retailing general household requirements. The former may be described briefly as Producers' Co-operative Societies and the latter as Consumers' Co-operative Societies. Particulars of those Producers' Societies which are also Consumers' Societies were compiled separately for the first time for the year 1931. The particulars given for New South Wales relate to societies registered under the Co-operation Act 1923-1929.

CO-OPERATIVE SOCIETIES.—SUMMARY, 1935.

Particulars.	N.S.W. 1934-35. (a)	Vic. 1934-35.	Qld. 1934-35.	S.A. 1935.	W.A. 1934-35.	Tas. 1934-35.	Total.
PRODUCERS' SOCIETIES.							
Number of Societies	110	60	46	30	3	11	260
Number of Branches	(c) 16	16	22	11	7	17	(d) 73
Number of Members	49,063	37,836	34,843	6,825	4,220	6,581	139,368
Gross Turnover (Sales) £	12,772,171	3,041,281	6,288,145	972,146	362,875	348,168	21,314,666
Other Income	27,285	246,645	52,330	143,061	23,641	16,408	509,370
Total Income	12,799,456	4,047,926	6,340,775	1,013,207	386,516	364,876	24,853,376
Total Purchases during Year £	10,048,683	1,077,102	1,771,611	728,705	281,108	248,020	14,520,815
Total Expenditure (b) £	12,538,976	3,891,176	6,348,943	946,973	349,729	356,811	24,432,608
Rebates and Bonuses	48,422	1,824	15,451	43,514	30,169	742	140,122
Dividends on Share Capital £	34,589	23,152	15,485	9,263	2,583	681	85,753
CONSUMERS' SOCIETIES.							
Number of Societies	49	20	12	7	6	3	97
Number of Branches	(c) 5	5	12	37	..	2	(d) 56
Number of Members	38,909	10,028	29,523	36,723	1,595	579	117,357
Gross Turnover (Sales) £	1,884,002	448,704	142,335	731,671	76,074	53,947	3,336,733
Other Income	20,480	12,652	23,503	18,250	2,212	640	77,737
Total Income	1,904,482	461,356	165,838	749,921	78,286	54,587	3,414,470
Total Purchases during Year £	1,406,384	371,088	128,639	562,172	60,905	43,374	2,572,562
Total Expenditure (b) £	1,820,263	452,985	163,372	703,795	74,600	52,820	3,267,841
Rebates and Bonuses	55,405	19,593	2,674	25,415	2,800	440	106,297
Dividends on Share Capital £	15,200	4,270	386	13,415	592	1,066	34,929
SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.							
Number of Societies	9	10	3	49	..	..	71
Number of Branches	4	26	1	46	..	..	77
Number of Members	4,551	11,044	532	13,750	..	..	29,877
Gross Turnover (Sales) £	967,764	2,567,097	107,150	1,217,470	..	..	4,859,481
Other Income	14,213	40,201	10,997	214,095	..	..	279,506
Total Income	981,977	2,607,298	118,147	1,431,565	..	..	5,138,987
Total Purchases during year £	813,996	1,966,520	99,401	1,038,992	..	..	3,918,909
Total Expenditure (b) £	966,123	2,535,671	113,441	1,352,860	..	..	4,968,008
Rebates and Bonuses	9,967	730	3,751	3,385	..	..	17,833
Dividends on Share Capital £	3,634	3,025	1,378	5,111	..	..	13,148

(a) Particulars relate to Societies registered under Co-operation Act 1923-1929.

(b) Working expenses and purchases.

(c) Not available.

(d) Excluding New South Wales

2. Liabilities and Assets.—The next table gives the liabilities and assets.

CO-OPERATIVE SOCIETIES.—LIABILITIES AND ASSETS, 1935.

Particulars.	N.S.W.(a) 1934-35.	Vic. 1934-35.	Qld. 1934-35.	S.A. 1935.	W.A. 1934-35.	Tas. 1934-35.	Total.
PRODUCERS' SOCIETIES.							
Liabilities—	£	£	£	£	£	£	£
Paid-up Capital ..	967,008	940,876	552,626	200,471	52,287	89,184	2,802,452
Loan Capital ..	..	193,511	413,048	250,181	5,675	41,061	903,476
Bank Overdraft ..	243,602	653,344	393,721	47,059	25	17,753	1,355,504
Accumulated Profits ..	..	115,324	94,393	49,142	13,598	9,199	2,402,283
Reserve Funds ..	829,420	286,415	731,175	216,671	41,998	14,953	..
Sundry Creditors ..	..	316,903	531,624	240,252	57,488	45,000	..
Other Liabilities ..	1,268,116	44,315	22,512	245,083	1,238	5,422	2,779,159
Total Liabilities ..	3,308,146	2,550,688	2,739,099	1,249,459	172,309	223,178	10,242,879
Assets—							
Land and Buildings ..	..	..	601,770	176,152	45,100	106,324	..
Machinery, Plant and other fixed Assets ..	1,826,186	1,215,223	1,257,125	293,774	43,259	38,023	5,602,936
Stocks ..	421,081	316,620	278,410	531,120	19,458	36,868	1,603,563
Sundry Debtors ..	782,119	593,019	450,222	121,980	39,179	28,918	2,015,437
Cash in hand and on deposit ..	189,649	97,534	80,367	74,794	10,807	4,769	457,920
Profit and Loss Account ..	..	132,330	8,525	13,308	..	5,014	159,377
Other Assets ..	89,111	195,756	62,680	38,331	14,506	3,262	403,046
Total Assets ..	3,308,146	2,550,688	2,739,099	1,249,459	172,309	223,178	10,242,879
CONSUMERS' SOCIETIES.							
Liabilities—	£	£	£	£	£	£	£
Paid-up Capital ..	545,551	141,810	60,348	381,497	15,047	21,152	1,165,405
Loan Capital ..	..	53,435	10,249	135,709	..	5,009	205,362
Bank Overdraft ..	81,701	77,558	20,154	40,722	6,197	1,347	233,679
Accumulated Profits ..	..	313,308	20,471	5,894	24,114	2,591	..
Reserve Funds ..	..	..	66,448	32,552	130,485	2,732	613,954
Sundry Creditors ..	..	..	43,399	17,878	23,044	6,230	..
Other Liabilities ..	281,305	7,618	8,370	1,900	486	1,990	396,203
Total Liabilities ..	1,221,865	416,739	161,445	738,371	33,283	42,900	2,614,603
Assets—							
Land and Buildings ..	..	..	60,414	225,052	7,644	16,159	..
Machinery, Plant and other fixed Assets ..	476,126	159,999	3,919	46,631	2,164	1,564	998,772
Stocks ..	294,617	88,312	24,721	174,011	8,302	11,978	602,541
Sundry Debtors ..	252,037	118,078	4,373	53,883	1,773	9,745	555,376
Cash in hand and on deposit ..	37,411	32,217	22,822	107,347	2,391	6,111	208,299
Profit and Loss Account ..	..	6,485	954	13,613	..	340	22,026
Other Assets ..	161,074	12,548	7,252	75,228	1,485	..	257,587
Total Assets ..	1,221,865	416,739	161,445	738,371	33,283	42,900	2,614,603
SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.							
Liabilities—	£	£	£	£	£	£	£
Paid-up Capital ..	..	80,973	151,931	17,898	396,253	..	647,055
Loan Capital ..	..	12,225	439,055	..	171,502	..	623,382
Bank Overdraft ..	..	34,093	131,211	12,953	302,086	..	540,943
Accumulated Profits ..	..	52,178	12,142	4	18,229	..	82,553
Reserve Funds ..	..	66,735	371,306	9,578	73,336	..	520,955
Sundry Creditors ..	..	79,714	139,027	9,495	223,472	..	451,308
Other Liabilities ..	..	8,051	861	804	49,398	..	59,674
Total Liabilities ..	..	333,969	1,246,733	50,792	1,294,376	..	2,925,870
Assets—							
Land and Buildings ..	..	..	248,948	6,464	189,170	..	613,495
Machinery, Plant and other fixed Assets ..	..	173,913	713,948	10,084	71,299	..	795,331
Stocks ..	..	50,183	86,139	11,516	231,158	..	387,996
Sundry Debtors ..	..	67,806	153,476	12,252	400,984	..	709,518
Cash in hand and on deposit ..	..	2,950	6,777	470	17,065	..	27,262
Profit and Loss Account ..	..	5,548	..	..	60,108	..	65,656
Other Assets ..	..	24,569	37,445	10,006	258,592	..	330,612
Total Assets ..	..	333,969	1,246,733	50,792	1,294,376	..	2,925,870

(a) Particulars relate to Societies registered under Co-operation Act 1923-1929.

D. INSURANCE.

§ 1. General.

Although insurance business is conducted under State laws where such laws are in existence, or otherwise under various Companies Acts or Special Acts, Section 51 of the Commonwealth Constitution Act confers the necessary powers on the Commonwealth Parliament to legislate in regard to "insurance other than State insurance; also State insurance extending beyond the limits of the State concerned." Legislation by the Commonwealth Parliament includes the Life Assurance Companies Act 1905 limiting the amount of assurance payable on the death of children, the Marine Insurance Act 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., and the Insurance Act 1932-1937, the principal features of which are given hereunder.

Companies, persons or associations of persons carrying on insurance business in the Commonwealth or in any Territory of the Commonwealth are required to deposit money or approved securities with the Commonwealth Treasurer, to the extent specified in the schedule hereunder.

SCHEDULE OF DEPOSITS.

Class of Company.	Life Assurance Business.	Other Insurance Business.
Existing companies (Australian and foreign)	£1,000 for every £5,000 of net liability up to a maximum deposit of £50,000	£1,000 for each £5,000 of annual premium income. Maximum deposit £40,000. Minimum deposit £1,000
New companies—Australia	£5,000 per annum until maximum of £50,000 is reached. For mutual companies, after the initial deposit of £5,000, £1,000 per annum until deposit reaches a maximum of £50,000	Initial deposit, £5,000. £1,000 for every £5,000 by which the annual premium income exceeds £25,000. Maximum deposit £40,000
Overseas—		
British	£50,000	£50,000
Foreign	£60,000	£60,000

Money deposited is to be invested by the Treasurer in prescribed securities according to the selection of the depositor, and all interest accruing on deposits or securities is to be paid to depositors. Deposits are to remain as security against liability to policy-holders, and are to be available to satisfy judgments obtained in respect of policies.

If the value of money and approved securities deposited has depreciated below the value required by the Act, the Treasurer may require the depositor to lodge additional deposits to bring the total to the prescribed value.

After this Act became law, State laws governing insurance deposits ceased to operate. Deposits held by States on 1st February, 1932, could, however, remain with the States subject to the conditions embodied in the laws of the States. Whilst deposits so remained with the State, the depositors, to the extent of the value of their deposits, were exempt from liability to make deposits under the Commonwealth Act, and the conditions of State laws continued to apply to the deposits until the Commonwealth Treasurer required their return to depositors who immediately had to make deposits with the Commonwealth to the prescribed extent.

The following are not regarded as insurance businesses under the Act:—

- Staff superannuation schemes;
- Schemes of religious organizations solely for insurance of their property; and
- Friendly Society, Union and Association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned.

The following shows particulars of deposits under the Insurance Act 1932, at 30th June, 1936.

Class of Insurance.	Deposited with—		Total.
	Commonwealth.	States.	
	£	£	£
Life	339,708	1,141,415	1,481,123
Other	347,030	2,293,910	2,640,940
Total	686,738	3,435,325	4,122,063

§ 2. Life Assurance.

1. **General.**—Since 1907 statistical returns have been collected from life assurance institutions, with results which are in the main satisfactory. The results for each of the earlier years may be found in the several Official Year Books and Finance Bulletins. The figures in the succeeding paragraphs refer to Australian business only, except where otherwise indicated.

2. **Institutions Transacting Business.**—(i) *General.* The number of institutions transacting life assurance business in Australia during 1935 was 27, including four overseas companies. Of the twenty-three Australian institutions, six are purely mutual and sixteen are public companies. One office is a State government institution.

(ii) *Ordinary and Industrial Business.* Of the institutions enumerated in the preceding paragraph, fourteen transacted both ordinary and industrial business. Ordinary and industrial business have, where possible, been kept separate, and figures relating to companies whose head offices are outside Australia have been restricted to the Australian business.

3. **Australian Business.** (i) *Ordinary.* (a) 1935. The following table shows particulars for each class of policy in existence during 1935. The amount assured in 1935 represents an average of more than £48 per head of population.

ORDINARY LIFE ASSURANCE—AUSTRALIAN BUSINESS 1935.

Class of Policy.					No. of Policies.	Sum Assured.	Average per Policy.
					No.	£	£
Assurances—							
Whole of Life .. .. .	..	..	..	..	374,554	185,470,711	495
Endowment .. .. .	..	..	..	..	529,670	118,863,153	224
Other .. .. .	..	..	..	..	17,366	14,470,379	833
Endowments .. .. .	..	..	..	..	44,007	7,214,072	164
Total .. .. .	..	..	..	..	965,597	326,018,315	338
Annuities					2,705	(a) 265,615	(a) 98

(a) Amount per annum.

(b) 1931-1935. Similar particulars for each of the last five years are shown below.

ORDINARY LIFE ASSURANCE 1931-1935.—AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1931 ..	871,089	285,204,656	327	9,424,411	2,651	135,280
1932 ..	866,084	286,288,696	331	9,354,001	2,112	137,384
1933 ..	877,173	292,469,393	333	9,703,250	2,334	166,693
1934 ..	908,620	304,778,667	335	10,240,507	2,512	207,387
1935 ..	965,597	326,018,315	338	10,873,331	2,705	265,615

(ii) *Industrial.* (a) 1935. Information in regard to industrial business in existence during 1935 is given in the following table:—

INDUSTRIAL LIFE ASSURANCE—AUSTRALIAN BUSINESS 1935.

Class of Policy.				No. of Policies.	Sum Assured.	Average per Policy.
				No.	£	£
Assurances—						
Whole of Life ..	..	..	..	168,880	3,868,832	23
Endowment ..	..	..	..	1,632,985	74,911,070	46
Other ..	..	..	..	..	..	..
Endowments ..	..	..	..	118,251	4,536,619	38
Total ..	..	..	..	1,920,116	83,316,521	43
Annuities ..	..	..	..	2	(a) 58	(a) 29

(a) Amount per annum.

(b) 1931-1935. Similar information for each of the last five years is shown below.

INDUSTRIAL LIFE ASSURANCE 1931-1935.—AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1931 ..	1,549,877	67,440,828	44	4,081,498	4	253
1932 ..	1,595,347	69,409,234	44	4,049,955	4	253
1933 ..	1,667,531	72,180,800	43	4,133,390	3	158
1934 ..	1,782,291	77,024,429	43	4,455,290	2	58
1935 ..	1,920,116	83,316,521	43	4,780,269	2	58

4. Receipts and Expenditure.—(i) *Ordinary Business.* The following table shows the aggregate Australian receipts for the last five years of all the institutions doing business in Australia. In the latter year premiums—new and renewal—amounted to over 63 per cent., and interest, dividends and rent to 34 per cent. of the Australian receipts.

ORDINARY LIFE ASSURANCE.—AUSTRALIAN RECEIPTS.

Heading.	Amount.				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Premiums—New ..	815,249	878,085	1,113,998	1,273,743	1,588,553
Renewal ..	8,609,162	8,475,916	8,589,252	8,966,764	9,284,778
Consideration for annuities ..	75,569	178,928	226,101	435,306	395,172
Interest, dividends and rents ..	6,102,804	5,367,434	5,532,932	5,686,744	5,896,289
Other receipts ..	365,225	385,253	326,892	280,502	23,297
Total Receipts ..	15,968,009	15,285,616	15,789,175	16,643,059	17,188,089

In 1935 claims accounted for 61 per cent. of the total expenditure; surrenders 14 per cent.; expenses of management 9 per cent.; commission 7 per cent.; and licence-fees and taxes 3 per cent.

ORDINARY LIFE ASSURANCE.—AUSTRALIAN EXPENDITURE.

Heading.	Amount.				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Claims ..	5,733,128	5,834,098	6,071,545	6,345,000	6,926,774
Surrenders ..	2,554,249	2,379,753	2,097,678	1,891,512	1,637,494
Annuities ..	103,560	106,890	119,282	151,377	171,517
Commission ..	572,887	586,092	640,305	704,020	856,890
Expenses of management ..	925,439	947,420	977,471	1,031,251	1,052,207
Licence fees and taxes	906,134	982,386	832,384	310,126	287,840
Shareholders' dividends	73,289	62,571	62,084	67,695	80,389
Cash bonuses paid to shareholders ..	878,310	726,721	585,688	282,860	283,013
All other expenditure	1,113,645	248,091	301,607	151,385	136,523
Total Expenditure ..	12,860,641	11,874,022	11,738,044	10,935,226	11,432,647

The excess of receipts over expenditure during the past five years was as follows:—1931, £3,107,368; 1932, £3,411,594; 1933, £4,051,131; 1934, £5,707,833; and 1935, £5,755,442. During the above years the proportions that expenditures bore to receipts were as follows:—1931, 80 per cent.; 1932, 78.7 per cent.; 1933, 74.3 per cent.; 1934, 65.7 per cent.; and 1935, 66.5 per cent.

(ii) *Industrial Business.* The aggregate Australian receipts for the years 1931 to 1935 of institutions transacting industrial business were as follows:—

INDUSTRIAL LIFE ASSURANCE.—AUSTRALIAN RECEIPTS.

Heading.	Amount.				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Premiums—New and Renewal	4,081,498	4,049,955	4,133,390	4,455,290	4,780,269
Interest, dividends and rents	1,239,068	1,062,294	1,082,143	1,175,245	1,287,113
Other receipts ..	16,220	20,434	26,568	26,326	44,007
Total Receipts ..	5,336,786	5,132,683	5,242,101	5,656,861	6,111,449

Expenditure during 1935 totalled £3,658,484. Claims amounted to over 46 per cent., commission to over 27 per cent., and expenses of management to over 15 per cent.

INDUSTRIAL LIFE ASSURANCE.—AUSTRALIAN EXPENDITURE.

Heading.	Amount.				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Claims	1,584,875	1,656,710	1,614,375	1,590,929	1,687,728
Surrenders	420,115	226,430	193,436	206,149	186,988
Annuities	285	231	1,071	136	40
Commission	812,153	840,422	866,430	962,185	1,008,811
Expenses of management	492,595	496,207	494,773	519,895	558,800
Licence fees and taxes	189,408	229,814	211,613	73,892	65,156
Shareholders' dividends	64,596	54,860	55,784	54,860	54,718
All other expenditure	403,070	180,864	123,926	138,027	96,243
Total Expenditure	3,967,097	3,685,538	3,561,408	3,546,073	3,658,484

The excess of receipts over expenditure for each of the last five years was:—1931, £1,369,689; 1932, £1,447,145; 1933, £1,680,693; 1934, £2,110,788; and 1935, £2,452,965.

The proportions that expenditure bore to receipts during the above years were—1931, 74 per cent.; 1932, 72 per cent.; 1933, 68 per cent.; 1934, 63 per cent.; and 1935, 60 per cent.

5. Liabilities and Assets, 1931-1935.—(i) *General.* The liabilities of the Australian institutions consist mainly of their assurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of loans on mortgage and policies; government, municipal and similar securities; shares; freehold property, etc. Loans on personal security are granted by very few of the Australian institutions.

(ii) *Australian Liabilities and Assets.* For various reasons several institutions do not attempt the division of liabilities and assets between the industrial and ordinary branches, and, therefore, the figures in the following tables relate to ordinary and industrial branches combined.

ORDINARY AND INDUSTRIAL LIFE ASSURANCE.—AUSTRALIAN LIABILITIES.

Heading.	Amount				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Shareholders' capital, paid up	1,445,045	1,426,306	1,399,390	1,409,545	1,439,251
Assurance and annuity funds	90,325,856	93,798,818	97,017,961	103,167,021	109,850,093
Other funds	13,022,705	13,430,486	14,377,576	15,401,241	16,294,586
Claims admitted but not paid	941,450	1,042,886	1,055,402	1,154,272	1,246,957
All other liabilities ..	2,346,360	2,329,505	2,595,643	2,954,675	3,283,206
Total Australian Liabilities ..	108,081,416	112,028,001	116,445,972	124,086,754	132,114,093

Separate details of Liabilities in Australia and outside Australia are not available for the following institutions:—Mutual Life and Citizens' Assurance Coy. Ltd., National Mutual Life Association, Western Australian Insurance Coy. Ltd., and Mutual Life Insurance Co. of New York. The aggregate Australian assets of these institutions included hereunder are as follows:—1931, £39,474,426; 1932, £38,606,189; 1933, £38,310,932; 1934, £42,385,954; and 1935, £44,879,839. Assets and liabilities of the Liverpool and London and Globe Insurance Company Ltd. are also excluded as separate details for Life and General Departments are not available.

Assets for the years specified are set out in detail in the table hereunder:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE.—AUSTRALIAN ASSETS.^(a)

Heading.	Amount.				
	1931.	1932.	1933.	1934.	1935.
	£	£	£	£	£
Government and municipal securities ..	74,317,848	79,472,958	82,294,398	88,389,264	94,854,302
Mortgages	37,354,976	36,543,532	36,600,242	38,520,928	40,932,324
Loans on companies' policies	19,122,781	19,814,898	20,265,261	20,579,816	20,837,744
Landed and house property	5,954,157	6,330,864	6,656,560	7,260,910	8,381,943
Life interests and reversions	205,560	315,943	302,602	277,694	288,050
Other investments ..	3,127,424	3,557,292	4,140,065	4,302,014	5,338,344
Outstanding premiums	1,122,747	1,073,141	1,020,492	941,164	904,900
Outstanding interest, dividends and rents	1,582,472	1,588,516	1,648,410	1,685,091	1,734,581
Cash	3,135,283	2,860,915	3,230,495	3,753,077	3,018,955
Establishment and organization accounts	1,082,056	1,017,443	1,091,659	1,125,700	1,125,668
All other assets ..	1,289,439	1,221,284	1,121,755	1,432,564	1,615,933
Total Australian Assets ..	148,294,743	153,795,886	158,371,939	168,268,222	179,092,834

(a) Excludes Australian assets of Liverpool and London and Globe Coy. Assets of other companies referred to above are included herein.

(iii) *Total Assets.* It has been thought desirable to restrict, wherever possible, the figures relating to life assurance to business in Australia. Several of the companies whose head offices are in Australia transact, however, a large amount of business elsewhere, viz., in New Zealand, in South Africa, and in the United Kingdom, while in the case of the foreign companies, the Australian business is insignificant compared with that done elsewhere. Particulars as to this foreign business of both Australian and foreign companies will be found in Finance Bulletin No. 27.

The total assets of all life companies operating in Australia amounted to £488,337,259 in 1935, of which government and municipal securities (£174,507,488), and mortgages (£94,595,468), represented more than 55 per cent. The figures in this and the previous two issues show substantial reductions when compared with earlier ones due to the restriction of the returns of the Prudential Insurance Co. Ltd., London, to its Australasian business, which is controlled by the Head Office of the Company in Sydney. Amended particulars comparable with the figures in this paragraph are given in Finance Bulletin No. 27, published by this Bureau.

6. *New Policies issued in Australia, 1935.*—(i) *Ordinary Business.* During 1935 122,004 new policies were issued for £40,970,610. The average amount per policy was £336, which compares with an average of £338 per policy for all policies which were in existence at the end of 1935.

(ii) *Industrial Business.* New policies to the number of 372,306 were issued during the year, for a total of £16,161,641. The average per policy which was over £43 was about the same as the average for all industrial policies current at the end of 1935.

7. *Policies Discontinued in Australia.*—(i) *Ordinary Business.* The volume of business which from various causes becomes void in each year is always large. The number and amount of policies, including annuities, discontinued in the last three years, and the reasons for discontinuance are given in the following table:—

ORDINARY LIFE ASSURANCE.—POLICIES DISCONTINUED IN AUSTRALIA.(a)

Mode.	1933.		1934.		1935.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity	19,243	4,310,392	19,800	4,521,770	20,880	4,861,770
Surrender	22,591	7,011,616	18,500	5,758,379	16,281	4,949,155
Forfeiture	30,035	11,154,904	31,673	10,802,277	30,812	10,418,397
Transfer	(b)—38	(b)—13,375	(b)—19	1,641	(b)—37	b—27,701
Total	71,831	22,463,537	70,044	21,084,067	67,936	20,201,567

(a) Includes Annuities.

(b) Transfers to Australian registers exceed transfers from Australia.

(ii) *Industrial Business.* The number of policies discontinued in this branch each year is also very large. Of the total amount of discontinuances during 1935 only about 16 per cent. was due to death or maturity, while roughly 78 per cent. was due to forfeiture.

INDUSTRIAL LIFE ASSURANCE.—POLICIES DISCONTINUED IN AUSTRALIA.(a)

Mode.	1933.		1934.		1935.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity ..	50,026	1,480,409	46,725	1,445,460	47,813	1,554,791
Surrender ..	15,860	736,383	14,517	673,992	13,175	620,065
Forfeiture ..	164,589	8,069,375	166,018	7,471,815	173,507	7,713,112
Transfer ..	44	1,754	(b)—85	(b)—5,406	(b)—70	(b)—4,581
* Total ..	230,519	10,287,921	227,175	9,585,861	234,425	9,883,387

(a) Includes Annuities.

(b) Transfers to Australian registers exceed transfers from Australia.

8. *Conspectus of Australian Life Assurance Legislation.*—A conspectus of Australian Life Assurance Legislation as then existing appeared in Official Year Book No. 18, pp. 1041 to 1059.

§ 3. Fire, Marine and General Insurance.

1. *Australasian Companies**.—(i) *General.* Returns in some detail are available showing the revenue and expenditure, assets and liabilities, and investments of 40 insurance companies having their head offices either in Australia, New Zealand, or Fiji. The business transacted by these companies represents from 55 to 60 per cent. of the aggregate Australian business, some particulars of which are given in par. 2 following.

(ii) *Revenue and Expenditure.* The most important items of revenue and expenditure are given below. The trade surplus in 1935-36 was £812,138, or 11.65 per cent. of premium income.

FIRE, MARINE AND GENERAL INSURANCE COMPANIES.—SUMMARY OF REVENUE AND EXPENDITURE.

Heading.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
No. of Companies	38	40	42	40	40
	£	£	£	£	£
Premiums, less reinsurances ..	5,964,532	5,891,040	6,041,391	6,387,181	6,970,718
Losses	3,560,972	3,262,215	3,036,047	3,371,346	3,767,682
Expenses, commission and taxes	2,297,928	2,278,135	2,312,421	2,329,111	2,390,898
Trade surplus	105,632	350,690	692,323	686,724	812,138
Interest, rent, etc.	745,519	684,674	680,968	681,305	601,713
Total surplus	851,151	1,035,364	1,373,291	1,368,119	1,503,851
Dividends and Bonuses paid ..	546,822	571,134	632,210	611,359	675,541
Ratio to premium income of—	%	%	%	%	%
(a) Losses	59.70	55.38	50.26	52.78	54.05
(b) Expenses, etc.	38.53	38.67	38.28	36.47	34.30
(c) Trade surplus	1.77	5.95	11.46	10.75	11.65

(iii) *Liabilities and Assets.* The liabilities and assets for the same period are set out in the following tables. Comparison of the results for 1935-36 (40 companies), with those for 1931-32 (38 companies) shows that paid-up capital increased by 5.3 per cent., while reserves increased by 14.5 per cent. Government securities represent an increasing proportion of assets.

* The statistical information in this paragraph has been extracted from the "Australasian Insurance and Banking Record".

FIRE, MARINE AND GENERAL INSURANCE COMPANIES.

Heading.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
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PAID-UP CAPITAL, RESERVES AND LIABILITIES.

	£	£	£	£	£
Paid-up capital ..	6,235,241	6,308,179	6,311,586	6,554,157	6,506,758
Reserves and reinsurance funds (a) ..	10,279,065	10,416,126	10,988,132	11,233,914	11,773,597
Undivided profits ..	662,229	735,443	801,204	837,255	988,301
Losses unsettled ..	851,417	929,467	852,808	890,106	1,057,319
Sundry creditors, etc. ..	1,754,254	1,691,647	1,000,394	1,511,909	1,632,589
Dividends, etc., to pay ..	339,803	369,438	408,019	358,139	423,613
Life assurance funds (b) ..	2,805,673	3,022,937	3,286,254	3,342,977	3,594,919
Total Liabilities ..	22,927,682	23,473,237	24,248,967	24,728,457	26,037,156

INVESTMENTS AND OTHER ASSETS.

	£	£	£	£	£
Loans on mortgage ..	745,445	797,417	747,112	689,508	906,802
Government securities, etc. ..	14,479,341	14,878,208	15,101,215	15,840,586	16,805,834
Landed and other property ..	3,304,802	3,236,307	3,182,121	3,104,536	3,066,330
Fixed deposits, etc. ..	1,805,276	1,709,384	2,008,208	1,960,170	1,973,553
Loans on life policies (b) ..	223,222	254,077	273,508	272,008	307,938
Investments ..	155,952	203,182	214,575	252,878	231,220
Cash and bills receivable ..	793,721	972,852	993,705	1,056,452	999,288
Sundry debtors and other assets ..	1,515,923	1,421,810	1,458,403	1,482,719	1,716,179
Total Assets ..	22,927,682	23,473,237	24,248,967	24,728,457	26,037,156

(a) Including amount required as reserves against unexpired risks.

(b) Some of the companies transact Life Business.

2. Aggregate Australian Business.—(i) *States*. While the foregoing statements relate to those companies only whose head offices are located in Australia, New Zealand or Fiji, the following particulars which are somewhat restricted in the range of information are in respect of all companies operating in Australia.

The appended table shows for each State the aggregate premium income, less reinsurances and returns, and claims paid, less reinsurances, together with the proportions of losses on premiums for all classes of insurance other than life for the years 1934-35 and 1935-36.

FIRE, MARINE AND GENERAL INSURANCE—PREMIUMS AND LOSSES.

State.	Premiums, less reinsurances and returns.		Losses, less reinsurances.		Proportion of Losses on Premiums.	
	1934-35.	1935-36.	1934-35.	1935-36.	1934-35.	1935-36.
	£	£	£	£	%	%
New South Wales ..	4,737,851	5,235,811	2,241,145	3,144,718	47.30	60.06
Victoria ..	3,234,259	3,551,378	1,313,394	1,516,927	40.61	42.71
Queensland ..	1,465,920	1,631,434	752,208	841,034	51.31	51.55
South Australia ..	832,938	914,566	301,269	326,542	36.17	35.70
Western Australia ..	964,609	1,087,779	454,809	507,335	47.15	46.64
Tasmania ..	300,182	338,209	103,713	124,679	34.55	36.86
All States ..	11,535,759	12,759,177	5,166,538	6,461,235	44.79	50.64

(ii) *Classes of Insurance.* The statement hereunder shows premiums and losses in respect of the principal classes of risks, with the proportions of losses on premiums for the years 1934-35 and 1935-36.

FIRE, MARINE AND GENERAL INSURANCE.—PREMIUMS AND LOSSES,
PRINCIPAL CLASSES OF RISK.

Class of Risk.	Premiums, less reinsurances and returns.		Losses, less reinsurances.		Proportion of Losses on Premiums.	
	1934-35.	1935-36.	1934-35.	1935-36.	1934-35.	1935-36.
	£	£	£	£	%	%
Fire ..	5,139,795	5,231,279	1,439,702	2,004,883	28.01	38.32
Workers' Compensation ..	2,284,642	2,789,468	1,854,394	2,203,788	81.17	79.00
Motor Vehicle ..	1,940,942	2,332,486	1,070,257	1,396,828	55.14	59.89
Marine ..	762,511	830,899	246,354	273,261	32.31	32.89
Personal Accident ..	357,469	409,244	146,952	167,540	41.11	40.94
All other ..	1,050,400	1,165,801	408,879	414,935	38.93	35.59
Total ..	11,535,759	12,759,177	5,166,538	6,461,235	44.79	50.64

The volume of business measured by the amounts of premium income shows that fire insurances represented about 45 per cent. of the total during 1934-35 and 41 per cent. during 1935-36, while next in importance were workers' compensation 20 per cent. during 1934-35 and 22 per cent. during 1935-36, and motor vehicle 17 per cent. in 1934-35 and 18 per cent. in 1935-36.

For several years prior to 1930-31 slightly more than 50 per cent. of the premium income was absorbed in satisfaction of claims. The proportion was reduced to about 48 per cent. in 1931-32, while during the next three years less than 45 per cent. was required on the average to meet losses. In 1935-36 this proportion again rose to about 50 per cent.

E. FRIENDLY SOCIETIES.

1. *General.*—Friendly societies are an important factor in the social life of the community, as probably more than one-third of the total population of Australia comes either directly or indirectly under their influence. Their total membership exceeds 550,000, but as certain benefits, such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must, even when due allowance is made for young and unmarried members, be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration,

and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules are conformable to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward annual returns as to their membership and their finances to the Registrar, and reports are published in most of the States dealing with the returns received. Up to and including the year 1930, returns for South Australia were for calendar years. The basis was then changed and the next statistical returns were for the eighteen months ended 30th June, 1932. The figures in the following tables are for the year 1934-35 in respect of all States except Tasmania where they relate to the calendar year 1935.

2. Number of Societies, Lodges and Members.—The number of different societies and lodges, the total number of benefit members at the end of the year, and their average number during the year are shown in the following table:—

FRIENDLY SOCIETIES.—SOCIETIES, LODGES AND MEMBERS, 1935.

State.	Number of Registered Friendly Societies.	Number of Lodges.	Benefit Members at End of Year.	Average No. of Benefit Members during the Year.
New South Wales (c)	31	2,429	204,626	204,840
Victoria ..	55	1,444	166,180	163,734
Queensland ..	61	606	67,653	66,865
South Australia (a) ..	17	(d) 368	71,043	70,962
Western Australia ..	14	342	23,377	23,061
Tasmania ..	19	192	24,584	(b) 24,408
Total ..	..	5,881	557,463	553,870

(a) Excludes Juvenile Branches with 25 or more members. (b) Estimated. (c) Excludes twenty miscellaneous societies consisting of Medical Institutes, Dispensaries, and Accident and Burial Societies. (d) Lodges containing male and female branches counted as two branches.

The total number of registered Friendly Societies is not given for Australia, as many of the societies operate in all the States.

3. Sickness and Death Returns.—Sick pay is generally granted for a number of months at full rates, then for a period at half rates, and in some societies is finally reduced to quarter rates. The following table shows the total number of members who received sick pay during the year, the number of weeks for which they received pay in the aggregate, and the average per member sick, and further the number of benefit members who died during the year, together with the proportion of deaths per thousand average members:—

FRIENDLY SOCIETIES.—SICKNESS AND DEATH RETURNS, 1935.

State.	Number of Members who received Sick Pay.	Total Number of Weeks Sick Pay Granted.	Average Number of Weeks per Member Sick.	Benefit Members.	
				Deaths.	Proportion of deaths per 1,000 (Average).
New South Wales	45,084	456,760	10.13	2,404	11.74
Victoria ..	41,057	460,787	11.22	1,833	11.20
Queensland ..	13,038	133,055	10.21	686	10.26
South Australia (a)	17,707	206,920	11.69	912	12.85
Western Australia	5,713	51,100	8.94	213	9.24
Tasmania ..	5,823	59,688	10.25	315	12.91
Total ..	128,422	1,368,310	10.65	6,363	11.49

(a) Excludes Juvenile Branches.

4. *Revenue and Expenditure.*—(i) *Revenue.* The financial returns are not prepared in the same way in each State, but an attempt has been made in the subjoined table to group the revenue under the main headings :—

FRIENDLY SOCIETIES.—REVENUE, 1935.

State.	Entrance Fees, Members' Contributions and Levies.	Interest, Dividends and Rents.	All other Revenue.	Total Revenue.
	£	£	£	£
New South Wales ..	712,140	176,254	27,089	915,483
Victoria ..	575,123	237,588	68,319	881,030
Queensland ..	235,341	79,674	(a)	315,015
South Australia ..	227,534	111,355	23,425	362,314
Western Australia ..	86,968	24,407	5,422	116,797
Tasmania ..	87,619	20,496	15,961	124,076
Total ..	1,924,725	649,774	140,216	2,714,715

(a) Included in interest, dividends and rents.

(ii) *Expenditure.* The returns relating to expenditure are in greater detail than those for revenue. The figures show that the excess of revenue for the year was £293,712 for Australia, representing about 10s. 7d. per average benefit member.

FRIENDLY SOCIETIES.—EXPENDITURE, 1935.

State.	Sick Pay.	Medical Attendance and Medicine.	Sums Paid at Death of Members and Members' Wives.	Adminis- tration.	All other Expendi- ture.	Total Expendi- ture.
	£	£	£	£	£	£
New South Wales ..	251,803	277,097	85,853	147,455	94,250	857,358
Victoria ..	265,389	246,653	46,218	123,212	83,267	766,739
Queensland ..	87,025	96,178	36,351	55,557	(a)	275,111
South Australia ..	105,863	91,158	40,074	45,955	26,448	309,498
Western Australia ..	31,231	31,741	11,362	20,177	6,123	100,634
Tasmania ..	33,898	28,031	23,428	18,057	8,249	111,663
Total ..	775,209	771,758	243,286	410,413	220,337	2,421,003

(a) Included in administration.

It appears from the above figures that sick pay averaged about 28s. per average benefit member, but, as the returns include pay at half and quarter rates, and as the proportion of these to full rates is not stated, the average given is somewhat indefinite. Medical attendance and medicine cost about 27s. 10d. per average benefit member.

5. *Funds.*—The two foregoing tables show that the surplus of revenue over expenditure in all States amounted to £203,712 for the year. Accumulations of profits arising in the sickness and funeral funds of these societies are invested pending claims by members, and at the end of the year 1935 the total funds of friendly societies amounted to £15,539,136 (£27 17s. 6d. per benefit member), of which approximately 15 millions were invested, principally on mortgage, loans on members' homes, real estate, and in Government and Municipal securities.

F. PROBATES.

1. Probates and Letters of Administration.—The value of the estates left by deceased persons gives some idea of the distribution of property among the general population. There were in 1935 approximately 54,800 deaths of adult persons, while the number of probates and letters of administration granted during the same period was 22,246. It would therefore appear that about 40 per cent. of the adults who died during the year were possessed of sufficient property to necessitate the taking out of probate. The details for each State are shown in the table hereunder :—

PROBATES AND LETTERS OF ADMINISTRATION, 1935.

Particulars.	New South Wales, 1934-35.	Victoria, 1935.	Queensland, 1934-35.	South Australia, 1935.	Western Australia, 1935.(b)	Tasmania, 1935.(c)	Total.
Probates—							
Estates No.	8,544	6,376	1,015	1,850	1,145	535	19,465
Gross Value £	20,300,912	22,459,793	3,814,674	4,759,960	2,733,711	1,513,076	55,582,126
Net Value £	(d)	19,734,906	(d)	3,830,715	2,378,969	1,291,865	27,236,453
Letters of Administration—							
Estates No.	(a)	1,728	195	372	378	108	(e) 2,781
Gross Value £	(a)	(a)	435,222	303,019	172,856	170,044	e 1,181,141
Net Value £	(a)	(a)	(d)	233,504	211,148	121,493	e 566,145
Total—							
Estates No.	8,544	8,104	1,210	2,222	1,523	643	22,246
Gross Value £	20,300,912	22,459,793	4,249,896	5,062,979	3,006,567	1,683,120	56,763,267
Net Value £	(d)	19,734,906	(d)	4,064,219	2,590,117	1,413,358	27,802,600

(a) Included with Probates.

(b) Applications lodged.

(c) Applications dealt with.

(d) Not available.

(e) Incomplete.

2. Intestate Estates.—The number of intestate estates placed under the control of the Curator during the year, and the amount of unclaimed money paid into Consolidated Revenue in each State during the year 1935, are given hereunder :—

INTESTATE ESTATES, 1935.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
		(c)	(c)			(g)	(d)
Intestate estates placed under control of Curator during 1935—							
Number ..	(h)	(h) 207	1,135	170	368	97	1,977
Gross Value £	(b)	(b)	633,006	98,677	(f) 24,488	32,552	788,723
Net Value ..	(b)	h 55,246	529,695	66,004	(b)	24,705	675,650
Unclaimed money paid into Consolidated Revenue by Curator during 1935 £	(b)	(a) 7,913	e 13,256	9,688	4,621	(h)	35,478

(a) Year ended 30th June, 1936.

(b) Not available.

(c) Year ended 30th June, 1935.

(d) Incomplete.

(e) Paid to Unclaimed Moneys Fund.

(f) Amount collected during year.

(g) Intestate estates wound up by Public Trustee, 1935-36.

(h) Estates dealt with by Curator.

CHAPTER XXVII. PUBLIC FINANCE.

A.—GENERAL.

In early issues of the Official Year Book the plan was adopted of including in a single Chapter under the general heading of "Finance" the more important particulars available in connexion therewith. A departure was made in Official Year Book No. 25 by dividing the subject into separate Chapters with the two broad headings of "Public Finance" and "Private Finance". Notwithstanding that the financial transactions of Local Government Bodies and certain statutory Governmental Bodies come within the category of Public Finance, it is convenient to deal with these in a separate Chapter.

The subject of "Public Finance" has been dealt with in this Chapter under the two major divisions of Commonwealth Finance—including currency and coinage—and State Finance. The close financial relations between the Commonwealth and States particularly since the Financial Agreement has been in operation, however, demand a combination of these two divisions under the heading of Commonwealth and State Finance.

Certain banking activities are conducted by both Commonwealth and State Governments, but as the services provided are essentially connected with the banking system of the Commonwealth they have been included in the section of the Private Finance Chapter relating to Banking. An exception has been made in the case of the Commonwealth Bank Note Issue Department, which is dealt with in sub-section "Currency and Coinage" of this Chapter.

B.—COMMONWEALTH FINANCE.

§ 1. General.

1. **Financial Provisions of the Constitution.**—The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Chapter IV., "Finance and Trade," being sections 51 to 105 of the Constitution Act. Two other sections which have a most important bearing on questions of Commonwealth finance are sections 69 and 51.

Section 69 provides for the transfer to the Commonwealth from the States of certain specified departments, while section 51, in outlining the powers of the Federal Parliament, implies the transfer or creation of various other departments. Section 57 deals with the financial relations between the Commonwealth and the States. These matters have been treated in some detail in previous issues of the Official Year Book and on page 890 of this issue a *résumé* is given of the constitutional obligations upon the Commonwealth regarding repayments to the States.

The Commonwealth Treasury issues annually a document entitled "The Treasurer's Statement of Receipts and Expenditure during the year ended the 30th June," with which is incorporated the report of the Commonwealth Auditor-General for the year. This series of annual statements is the principal authority for the majority of the tables given herein.

2. **Accounts of Commonwealth Government.**—(i) *General.* The Commonwealth Government, like the State Governments, bases its accounts mainly upon three funds, the Consolidated Revenue Fund, the Trust Fund and the Loan Fund. The last mentioned fund came into existence in the financial year 1911-12, but on the outbreak of war it became so important that it was treated in two parts—a General Loan Fund mainly for purposes of Public Works, and a War Loan Fund for purely war purposes. From the year 1923-24 inclusive the loan expenditure on War Service Homes was debited against works loan expenditure. Previously such expenditure had been a charge on War Loans. Since the year mentioned the transactions of the War Loan Fund consists mainly of credits arising from repayments of expenditure during previous years.

(ii) *Receipts, Expenditure, &c.* The following statement shows for the period 1921-22 to 1930-37 the Receipts, Expenditure, Excess Receipts or Deficiency for the year together with the accumulated result and the payments made from the excess receipts. The receipts and expenditure on account of the Balance of Interest on States' Debts payable by the States to the Commonwealth under the Financial Agreement have been excluded.

COMMONWEALTH CONSOLIDATED REVENUE—RECEIPTS, EXPENDITURE, ETC.

Year.	Receipts.	Expenditure.	Ordinary Transactions.		Accumulated Result.		Payments from Excess Receipts.
			Excess Receipts.	Deficiency.	Excess Receipts.	Deficiency.	
	£	£	£	£	£	£	£
1921-22 ..	63,195,796	64,195,699	..	209,903	6,408,424	..	..
1922-23 ..	63,834,385	62,814,235	1,020,150	..	7,428,574	..	..
1923-24 ..	65,078,688	62,500,354	2,578,334	..	2,391,153	..	..
1924-25 ..	67,697,124	67,178,748	518,376	..	3,109,529	..	47,415,755
1925-26 ..	70,203,572	70,577,204	..	373,632	285,897	..	62,450,000
1926-27 ..	75,544,382	72,908,785	2,635,597	..	2,821,494	..	100,000
1927-28 ..	73,808,227	76,438,464	..	2,630,237	..	12,628,743	2,820,000
1928-29 ..	74,894,799	77,253,774	..	2,358,975	..	14,987,718	..
1929-30 ..	77,143,389	78,614,392	..	1,471,003	..	16,458,721	..
1930-31 ..	69,566,920	80,324,539	..	10,757,619	..	17,216,340	..
1931-32 ..	71,532,298	70,218,207	1,314,091	..	1,314,091	..	..
1932-33 ..	73,512,609	69,966,201	3,546,608	..	3,546,609	..	..
1933-34 ..	73,941,953	72,640,383	1,301,570	..	6,162,269	..	..
1934-35 ..	77,369,105	76,657,900	711,205	..	713,474	..	16,160,000
1935-36 ..	82,203,341	78,635,621	3,567,720	..	3,567,720	17,002,866	17,134,474
1936-37 ..	82,807,977	81,531,419	1,276,558	..	1,276,558	15,935,146	63,567,720

(a) £4,915,755 was used for debt redemption, and £2,500,000 transferred to Trust Funds. (b) Naval construction, £1,500,000; Main Roads, £750,000; Science and Industry investigations, £100,000; and prospecting for oil and precious metals, £100,000. (c) Prospecting for oil and precious metals. (d) Naval construction and Defence reserve, £2,250,000; Science and Industry investigation, £250,000; Civil Aviation, £200,000; Purchase of radium, £100,000; and Geophysical Survey of Australia, £20,000. (e) See table following. (f) Met by temporary advance from loan fund.

(iii) *Excess Receipts.* Particulars of the excess receipts, accumulated balances and allocation of excess receipts for each of the past five years are as follows :—

COMMONWEALTH CONSOLIDATED REVENUE—EXCESS RECEIPTS.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Accumulated balance	1,314,091	4,860,699	6,162,269	713,474	3,567,720
Excess receipts	4,544,608	1,331,820	711,205	3,567,720	1,276,558
Total for year	4,860,699	6,162,269	6,873,474	4,281,194	4,844,278
Expenditure from excess receipts—					
Grants to States .. .. .	..	..	2,000,000	500,000	500,000
Defence equipment .. .. .	..	..	4,160,000	..	2,000,000
Reduction of deficit .. .. .	..	..	..	213,474	1,067,720
Total .. .. .	..	..	6,160,000	713,474	3,567,720
Accumulated balance	4,860,699	6,162,269	713,474	3,567,720	1,276,558

It is proposed to allocate £1,000,000 of the accumulated surplus at 30th June, 1937 for Post Office new works and £276,558 for the reduction of the deficit.

§ 2. Consolidated Revenue Fund.

Division I.—Nature of Fund.

The provisions made for the formation of a Commonwealth Consolidated Revenue Fund, and the means to be adopted for operating on the fund, are contained in sections 81, 82 and 83 of the Constitution.

Division II.—Revenue.

1. General.—The following table furnishes details of the revenue from each source and the amount per head of population under each of the three main headings during the years 1932-33 to 1936-37 :—

COMMONWEALTH CONSOLIDATED REVENUE—SOURCES.

Source.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Taxation (a)	56,146,036	56,408,728	58,754,524	63,617,306	62,846,257
Percentage of Total	76.4	76.3	75.9	77.4	75.9
Per head of population (d) ..	£8 10 0	£8 9 6	£8 15 4	£9 8 6	£9 4 0
Business Undertakings (a) ..	12,894,580	13,460,911	14,279,362	15,222,652	16,222,910
Percentage of Total	17.5	18.2	18.5	18.5	19.6
Per head of population (d) ..	£1 19 1	£2 0 6	£2 2 7	£2 5 1	£2 7 8
Territories (b)	202,936	235,091	250,087	313,770	300,253
Percentage of Total	0.3	0.3	0.3	0.4	0.4
Per head of population (d) ..	£0 0 7	£0 0 8	£0 0 9	£0 0 11	£0 0 11
Other Revenue—					
Interest, etc. (c)—					
Loans to States for Soldier Settlement	1,083,865	1,083,865	1,116,827	(e)	(e)
Other	1,384,639	1,327,195	1,439,571	1,338,510	1,074,423
Coinage	49,568	139,263	133,703	167,719	295,167
Defence	47,753	41,213	43,760	42,105	40,149
Quarantine	17,312	17,068	18,005	18,000	67,134
Patents, Trade Marks, etc. ..	45,018	51,444	55,209	58,783	62,163
Marine	205,133	193,532	212,526	218,915	216,406
Pension Contributions	48,673	31,733	32,887	31,261	..
Net Profit on Australian Note Issue ..	1,108,519	728,998	797,344	855,720	808,585
Bankruptcy	31,787	32,475	31,324	29,517	30,509
Export charges	Dr. 1,874	2,072	Dr. 1,805	2,615	Dr. 2,544
Miscellaneous	248,864	188,365	222,872	286,378	750,505
Total	4,269,257	3,837,223	4,085,132	3,049,613	3,438,557
Percentage of Total	5.8	5.2	5.3	3.7	4.1
Per head of population (d) ..	£0 13 0	£0 11 7	£0 12 2	£0 9 0	£0 10 1.
Grand Total (e)	73,512,809	73,941,953	77,369,105	82,203,341	82,807,977
Per head of population (d) ..	£11 2 8	£11 2 3	£11 10 10	£12 3 6	£12 3 5
Balance of Interest on States' Debts—recoverable from States	25,743,350	25,480,072	24,300,832	24,786,646	25,081,605

(a) For details, see succeeding pages. (b) Exclusive of Railways and other items which appear elsewhere under their appropriate headings. (c) Excludes Interest on States' Debts payable by States. (d) Based on mean population of each financial year. (e) Not now paid to Consolidated Revenue. (f) Excludes interest (recovered from States) on loans for Grafton-South Brisbane Railway and for Development and Migration now credited to "Balance of Interest on States' debts".

2. Taxation.—(i) Total Collections. (ii) Amount. Collections under each heading for the years 1932-33 to 1936-37 are given below :—

TAXATION—TOTAL COLLECTIONS.

Heading.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Customs	21,313,793	22,326,823	25,289,719	28,068,870	28,782,784
Excise	11,678,050	11,928,019	12,579,767	13,368,847	14,210,248
Sales Tax	9,369,276	8,695,689	8,554,076	9,432,483	8,008,427
Flour Tax .. ..	..	1,253,957	798,354	1,150,724	Dr. 12,193
Land Tax	1,650,311	1,345,393	1,281,424	1,326,991	1,435,465
Income Tax	10,878,718	9,314,768	8,761,619	8,775,562	8,556,014
Estate Duties	1,126,996	1,511,296	1,507,827	1,472,860	1,792,000
Entertainments Tax	134,042	51,216	Dr. 599	13	107
War Time Profits Tax	Dr. 5,750	1,567	Dr. 17,663	20,956	..
Wool levy (a) .. ..	..	..	..	..	72,805
Total Taxation	56,146,036	56,408,728	58,754,524	63,617,306	62,846,257
Percentage on Total Revenue ..	76.4	76.3	75.9	77.4	75.9

(a) For publicity and research.

(b) *Percentages of Total Collections.* The following table shows the percentages of the collections under each class of taxation on the total collections for the last five years :—

TAXATION—PERCENTAGES ON TOTAL COLLECTIONS.

Heading.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	%	%	%	%	%
Customs	38.0	39.6	43.0	44.1	45.8
Excise	20.8	21.1	21.4	21.0	22.6
Sales Tax	16.7	15.4	14.6	14.8	12.7
Flour Tax .. ..	..	2.2	1.4	1.8	..
Land Tax	2.9	2.4	2.2	2.1	2.3
Income Tax	19.4	16.5	14.9	13.8	13.6
Estate Duties	2.0	2.7	2.5	2.4	2.9
Entertainments Tax	0.2	0.1	..	..	..
War Time Profits Tax .. ..	..	..	..	..	..
Wool levy .. ..	..	..	..	..	0.1
Total	100.0	100.0	100.0	100.0	100.00

(ii) *Customs Revenue.* (a) *Classified.* Particulars for the five years 1932-33 to 1936-37 are furnished in the following table :—

COMMONWEALTH CUSTOMS REVENUE—CLASSIFICATION.

Classes.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Stimulants	1,027,012	1,051,843	1,089,416	1,140,687	1,157,707
Narcotics	2,529,473	2,661,013	2,807,749	2,940,367	3,041,660
Sugar	844	605	827	1,618	4,204
Agricultural products	1,363,600	1,123,576	1,222,775	1,218,026	1,280,331
Apparel and textiles ..	2,163,750	2,160,207	2,511,474	2,635,663	2,752,891
Metals and machinery	1,122,346	1,376,097	1,904,486	2,235,917	2,195,393
Oils, paints, etc. ..	5,392,554	6,110,306	6,769,588	7,681,244	8,401,394
Earthenware, etc. ..	275,660	305,452	390,629	441,431	460,849
Drugs and chemicals ..	287,736	262,752	265,114	284,718	265,068
Wood, wicker and cane	401,149	515,400	491,283	529,402	726,350
Jewellery, etc. ..	312,914	364,200	406,918	415,606	451,511
Leather, etc. ..	349,918	367,657	360,696	361,469	412,714
Paper and stationery	424,732	410,931	425,060	439,206	417,048
Vehicles	337,858	657,099	1,335,657	1,793,188	2,186,245
Musical instruments ..	6,451	9,437	16,210	22,186	30,041
Miscellaneous articles	640,737	694,092	850,380	1,029,470	920,854
Primage	4,512,090	4,080,456	4,259,210	4,678,358	3,833,165
Other receipts	164,969	166,700	181,347	200,314	209,359
Total Customs	21,313,793	22,326,823	25,289,719	28,068,870	28,782,784

(b) *States.* The following table shows the Customs Duties collected in each State during the last five years :—

COMMONWEALTH CUSTOMS DUTIES—COLLECTIONS, EACH STATE.

State.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
New South Wales (a)	9,282,263	9,917,405	11,141,391	12,141,828	12,807,629
Victoria ..	7,351,501	7,502,201	8,430,426	9,453,887	9,338,212
Queensland..	1,890,206	1,982,716	2,504,179	2,682,260	2,652,736
South Australia (b)	1,363,710	1,423,627	1,576,979	1,861,204	1,906,269
Western Australia ..	1,177,655	1,251,919	1,350,046	1,585,967	1,704,018
Tasmania ..	248,458	248,955	286,698	343,724	373,920
Total ..	21,313,793	22,326,823	25,289,719	28,068,870	28,782,784

(a) Includes Federal Capital Territory.

(b) Includes Northern Territory.

(iii) *Excise Revenue.* (a) *Classified.* Particulars concerning the amount of Excise collected under each head during each of the years ended 30th June, 1933 to 1937, are given hereunder :—

COMMONWEALTH EXCISE REVENUE—CLASSIFICATION.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Beer ..	4,867,844	4,770,439	5,093,858	5,621,051	6,109,526
Spirits ..	1,298,325	1,352,092	1,412,761	1,476,774	1,490,178
Concentrated Grape Must ..	2,229	2,683	1,545	1,926	2,140
Petrol ..	461,313	517,617	625,901	630,068	706,884
Matches ..	72,735	77,160	77,391	81,039	77,438
Tobacco ..	4,751,575	4,822,658	4,962,424	5,087,211	5,283,641
Cigarette Tubes and Papers ..	201,186	362,621	384,173	424,853	450,516
Licences ..	11,895	11,950	11,120	12,311	11,677
Playing Cards ..	11,548	10,799	10,594	10,614	12,231
Wireless Valves ..	..	..	..	23,000	66,017
Total Excise ..	11,678,650	11,928,019	12,579,767	13,368,847	14,210,248

(b) *States.* Excise collections in each State for the last five years were as follows :—

COMMONWEALTH EXCISE REVENUE—COLLECTIONS, EACH STATE.

State.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
New South Wales ..	5,156,998	5,558,783	5,863,305	6,063,761	6,724,164
Victoria ..	3,463,238	3,561,681	3,769,155	4,100,054	4,265,286
Queensland..	1,266,235	1,139,280	1,200,478	1,212,596	1,250,125
South Australia (a) ..	829,438	746,788	760,531	932,145	856,021
Western Australia ..	856,393	810,212	862,501	914,603	957,684
Tasmania ..	106,348	111,275	123,797	145,688	156,968
Total ..	11,678,650	11,928,019	12,579,767	13,368,847	14,210,248

(a) Includes Northern Territory.

(iv) *Other Taxation.* (a) *Collections paid to Revenue.* The Commonwealth Government imposes other taxes as follows:—Land Tax, Estate Duty, Income Tax, War Time Profits Tax, Sales Tax, and Wool Tax for publicity and research. Entertainments and Flour Taxes have now been abolished. The following statement shows particulars of the collections on account of each of the above taxes during the last ten years. Owing to certain accounting technicalities the figures herein differ slightly from those on the following pages showing further particulars of the several taxes.

OTHER TAXATION COLLECTIONS, AUSTRALIA.

Year.	Land Tax.	Estate Duty.	Income Tax.	War-time Profits Tax.	Entertainments Tax.	Sales Tax.	Flour Tax.
	£	£	£	£	£	£	£
1927-28 ..	3,027,206	1,752,118	10,165,175	Dr. 112,236	358,865	..	..
1928-29 ..	2,988,885	2,080,149	9,841,496	Dr. 24,309	358,697	..	..
1929-30 ..	2,840,078	2,122,478	11,120,029	Dr. 14,678	316,121	..	..
1930-31 ..	2,758,598	2,068,865	13,604,374	Dr. 794	186,661	3,472,854	..
1931-32 ..	2,156,765	1,385,811	13,481,982	Dr. 33,755	133,072	8,425,067	..
1932-33 ..	1,650,311	1,126,996	10,878,718	Dr. 5,750	134,042	9,369,276	..
1933-34 ..	1,325,393	1,511,296	9,314,768	1,567	51,210	8,695,689	1,253,957
1934-35 ..	1,281,424	1,507,527	8,701,619	Dr. 17,063	Dr. 599	8,554,076	798,354
1935-36 ..	1,326,991	1,472,860	8,775,562	20,956	13	9,432,483	1,150,724
1936-37(a) ..	1,435,465	1,792,600	8,556,014	..	107	8,003,427	Dr. 12,193

(a) In addition wool levy collections for publicity and research totalled £72,805.

"Other Taxation" is assessed and collected in general by the Commissioner of Taxation. The organization comprises an office in each State assessing tax-payers who are concerned with that State only, and a Central office assessing tax-payers whose interests are in more than one State. Taxes, however, may be paid to any office, so that the sums actually received by any office do not correspond to the assessments made by that office and frequently differ by very large amounts. Consequently the actual receipts by any State office, e.g., of income tax by the Queensland office, may include tax in respect of Central Office or New South Wales assessments, and, therefore, may not be a proper measure of income tax paid on account of income derived from Queensland.

The actual receipts by the various offices are the figures of necessity used by the Treasury for accounting purposes, and may be called the "Treasury" figures. These figures have been used in issues of the Official Year Book prior to No. 25. In order to give a more significant picture of the taxation in States, these figures have been discarded, and in their place are given figures supplied by the Commissioner of Taxation, which refer strictly to the assessments made on account of the State specified. The totals of these figures do not quite agree with the total Treasury figures owing to certain technicalities of accounting, but the differences are small. The Taxation Office figures give a fair comparison between States, e.g., in taxation paid per head, but do not give the absolute measure of taxation, because the Central Office collections, which include taxation on account of all States, have not been allocated to the States. In the absence of precise information, it may be assumed as a rough approximation that Central Office collections may be divided among States in proportion to State office collections. It is probable, however, that a somewhat larger share is derived from the more populous States, New South Wales and Victoria.

(b) *Land Tax.* Commonwealth Land Tax was first imposed in 1910-11, when the rate of tax was 1-30,000d. on the first £1 in excess of an unimproved value of £5,000, increasing by 1-30,000d. for every additional £1 up to £75,000 where the increment of tax was 6d. and the average rate 3½d. The increment of tax of 6d. operated only on the excess of £75,000. The general exemption of £5,000 did not apply to absentees, the rate for whom is always 1d. more than for residents, and the first £5,000 of value for an absentee bore a flat rate of 1d. per £1. In 1914-15, the rate of tax was amended by making the tax on £1, 1-18,750d. increasing by 1-18,750d. for each

additional £1 reaching an increment of tax of 9d. at £75,000 with an average over the whole of such field of 5d. per £1. The increment of tax applied to the excess over £75,000. Absentees correspondingly paid 1d. per £1 more than residents. A 20 per cent. increase which was imposed in 1918-19 was withdrawn in 1922-23. A reduction of 10 per cent. was granted in 1927-28, but no further alteration in the rates took place until 1932-33, when a reduction of 33½ per cent. was granted, followed by a further alteration in 1933-34 fixing the rates at 50 per cent. of those effective in 1927-28. The unimproved value of lessees' estates on pastoral leases from the Crown was subject to land tax only in the years 1914-15 to 1922-23 inclusive.

Land Tax receipts in each State and Central Office for the years 1932-33 to 1936-37 were as follows. The particulars shown differ slightly from those quoted in (a) above.

LAND TAX RECEIPTS.

State, etc.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Central Office	564,149	440,522	399,839	471,168	482,126
New South Wales	530,293	456,434	471,857	460,030	530,724
Victoria	366,229	286,756	274,671	266,033	277,718
Queensland	34,636	19,179	29,898	24,827	27,159
South Australia	67,432	52,410	51,758	55,104	54,878
Western Australia	61,569	41,913	40,337	42,881	51,833
Tasmania	15,238	11,644	11,296	12,036	11,539
Total	1,639,546	1,308,858	1,285,656	1,332,079	1,435,977

(c) *Estate Duty.* The Commonwealth Estate Duty Act 1914 and Estate Duty Assessment Acts impose a duty on the estates of deceased persons where the net value of the estate exceeds £1,000. The rate of tax where the value of the estate for duty does not exceed £2,000 is £1 per cent. increasing by one-fifth of £1 for each £1,000 or part thereof in excess of £2,000, so that the percentage shall not exceed 15. Where the estate passes to a widow, children, or grand-children, the duty is payable at two-thirds of the ordinary rate.

Particulars of the collections in each State and Central Office for the last five years are appended. Owing to certain accounting technicalities, these figures differ slightly from the Treasury returns given in (a) above.

ESTATE DUTY RECEIPTS.

State, etc.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Central Office	466,972	697,474	644,177	721,724	989,688
New South Wales	273,467	379,524	375,777	314,912	324,305
Victoria	215,223	249,808	301,351	237,474	308,719
Queensland	56,507	57,104	61,857	74,117	76,784
South Australia	63,459	66,734	81,740	71,497	66,447
Western Australia	28,180	17,832	29,516	41,307	21,110
Tasmania	15,252	40,117	14,635	8,426	10,253
Northern Territory .. ..	..	..	..	73	..
Total	1,119,060	1,508,593	1,509,053	1,469,530	1,797,366

Particulars relating to the number and value of estates with duty assessed for each of the last five assessment years are given in the table hereunder:—

ESTATE DUTY ASSESSMENTS.

Particulars.		1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
Number of Estates	No.	7,536	7,374	8,072	8,157	8,887
Gross Value(a) ..	£,000	49,967	45,695	52,434	52,965	56,009
Dutiable Value ..	£,000	40,519	36,989	42,423	42,594	45,121
Duty Payable ..	£	1,488,956	1,283,848	1,477,170	1,454,450	1,407,355
Average dutiable value	£	5,376	5,016	5,256	5,222	5,077
Average duty per estate	£	197	174	183	178	165

(a) Assessed values.

(d) *Income Tax.* The first Commonwealth Income Tax was levied during the year 1915-16. The Income Tax Assessment Act 1936 consolidated and amended the laws relating to the imposition, assessment and collection of income tax. Full details of this Act and a commentary on the Income Tax law are contained in an explanatory handbook* which also gives particulars relating to the pre-existing law. The following statement gives an index of the rate of normal tax on personal exertion and property incomes up to and including the year 1936-37. The table gives an index of the rate of tax on the taxable amount of income, and does not take into account the variations in assessment due to changes in exemption and abatements and in the methods of assessment.

INCOME TAX—INDEX OF RATE.

Assessment years in which Rates were Amended.	Index of Rate of Tax.	Assessment years in which Rates were Amended.	Index of Rate of Tax.
1915-16	1,000	1929-30	1,214 (a)
1916-17	1,250	1930-31	1,351 (a) (b)
1918-19	1,625	1931-32	1,419 (a) (c)
1920-21	1,706	1932-33	1,419 (a) (d)
1922-23	1,535	1933-34	1,313 (a) (e)
1924-25	1,380	1935-36	1,313 (a) (f)
1925-26	1,200	1936-37	1,181 (a) (g)
1927-28	1,080		

(a) Estimated. (b) In addition, a further tax of 1s. 6d. in the £1 was imposed on all taxable income from property. (c) In addition, a further tax of 2s. in the £1 was imposed on all taxable income from property over and above the exemption of £250.

(d) In addition, a further tax of 2s. in the £1 was imposed on all taxable income from property over and above the exemption of £250. (e) In addition, a further tax of 1s. 2. 4d. in the £1 was imposed on all taxable income from property over and above the exemption of £250. (f) In addition, a further tax of 1s. in the £1 was imposed on all taxable income from property over and above the exemption of £250. (g) Further tax on property abolished.

For the assessment years 1929-30 and 1930-31 the increases in the rates of tax were graduated according to the amount of taxable income. In 1929-30, for example, no increase was made on taxable incomes up to £200, while increases of 10 per cent., 15 per cent., and 20 per cent. were imposed on higher taxable income groups. For the 1930-31 assessment, taxable income from property was, in addition, subject to a further tax of 1s. 6d. in the £1.

A new scale of rates was struck for the assessment year 1931-32, designed to consolidate all existing rates to 1930-31, and increase them by 5 per cent. At the same time the further tax on property income was increased to 2s. in the £1.

No change was made in the rates of normal tax for the 1932-33 assessment but the further tax of 2s. in the £1 on income from property was payable only on such income in excess of £250. For the 1933-34 assessment the consolidated rate for personal exertion

* "Explanatory handbook showing the differences between the Income Tax Assessment Act 1936 and the Income Tax Assessment Act 1922-1931" issued by the Commissioner of Taxation under the authority of the Commonwealth Treasurer, August, 1936.

income assessments was reduced by 15 per cent. Ordinary rates on incomes from property remained unaltered, but the further tax was reduced to 1s. 2.4d. in the £1. The rate of tax applicable to companies was reduced from 1s. 4d. in £1 to 1s. in £1.

No alteration was made to the rates of tax in respect of the 1934-35 assessment, but the method of applying the statutory exemption was varied.

The special tax on property income was reduced from 1s. 2.4d. in £1 to 1s. in £1, but otherwise the rates were not altered for the 1935-36 assessment. A reduction of 10 per cent. was granted for the 1936-37 assessment on incomes derived from personal exertion and property, and the special tax on property incomes was abolished. The rate of tax applicable to companies remained the same, namely, 1s. in £1.

The following table shows the receipts from Income Tax in each State and Central Office for the last five years. As previously mentioned, the totals differ from figures already given in (a) above.

INCOME TAX RECEIPTS.

State, etc.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Central Office	2,977,481	3,237,722	3,011,356	2,883,792	2,929,292
New South Wales	4,052,877	2,780,215	2,474,276	2,615,474	2,489,503
Victoria	2,299,232	1,946,022	1,910,619	1,823,450	1,773,341
Queensland	717,827	549,157	536,431	577,306	506,076
South Australia	342,303	352,193	364,505	398,578	370,738
Western Australia	341,979	300,743	321,174	349,374	340,268
Tasmania	132,337	107,768	118,692	107,393	104,850
Northern Territory	2,671	1,002	1,932	2,434	2,232
Total	10,866,707	9,274,822	8,738,985	8,757,801	8,516,300

In the above table differences in the rapidity of assessment and collection will affect the comparison from year to year. With this proviso, the State collections (excluding Central Office collections) relative to population at the beginning of the year specified may be given.

INCOME TAX RECEIPTS PER HEAD OF POPULATION.

(EXCLUDING CENTRAL OFFICE COLLECTIONS.)

State, etc.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	s. d.	s. d.	s. d.	s. d.	s. d.
New South Wales	31 5	21 5	18 11	19 9	18 9
Victoria	25 5	21 5	20 11	19 10	19 3
Queensland	15 4	11 7	11 2	10 11	10 5
South Australia	11 10	12 1	12 6	13 8	12 8
Western Australia	15 0	13 8	14 6	15 8	15 2
Tasmania	11 8	9 6	10 5	9 5	9 1
Six States	24 0	18 3	17 2	17 6	16 7

Agreements made in 1923 between the Commonwealth and all the States except Western Australia provide that the Commonwealth tax and the State tax shall be collected by an officer acting for the Commonwealth and State, the Commonwealth appointing the State Commissioner as Deputy Commonwealth Commissioner for the State under the Income Tax Assessment Act of the Commonwealth. Provisions are included relating to the transfer of officers, the accounting of receipts and the division of expenses. A joint form of income tax return is to be used in cases where the income is derived in one State only. The respective agreements are to remain in operation for a period of five years, and thereafter until the expiration of not less than six calendar months, upon notice in writing by either party to the agreement.

In Western Australia an arrangement was made previously by which the Commonwealth undertakes the collection of the State income tax.

(e) *Entertainments Tax.* The tax on admission to entertainments operated from 1st January, 1917, when the rate imposed was 1d. for admissions exceeding 6d. but not exceeding 1s. For admissions exceeding 1s. the rate was 1d. for the first 6d. and $\frac{1}{2}$ d. for each 6d. or part in excess of 1s. On 1st December, 1919, the rate of tax was amended to $\frac{1}{2}$ d. on admissions of 6d., and 1d. where admission exceeded 6d. but did not exceed 1s.; otherwise the original rate operated. A further amendment, operative from 2nd October, 1922, provided for the payment of 1d. for admissions of 1s., but did not affect the rate on admissions exceeding 1s. From 15th October, 1925, until 27th October, 1933, when the Entertainments Tax Act was repealed, the Act provided for the payment of a tax of $1\frac{1}{2}$ d. on admissions of 2s. 6d. with an additional $\frac{1}{2}$ d. for each 6d. or part of 6d. by which the payments exceed 2s. 6d.

The amount of Entertainments Tax received in each State for the last five years, 1930-31 to 1934-35, is given below :—

ENTERTAINMENTS TAX RECEIPTS.

State.	1930-31.	1931-32.	1932-33.	1933-34.(c)	1934-35.
	£	£	£	£	£
New South Wales (a) ..	76,597	52,278	52,413	19,383	168
Victoria ..	63,541	47,620	49,650	18,010	Dr. 585
Queensland ..	23,887	16,371	14,798	6,787	43
South Australia (b) ..	4,991	4,051	4,252	1,665	Dr. 2
Western Australia ..	15,068	12,283	10,546	4,475	Dr. 223
Tasmania ..	1,810	1,026	981	332	..
Total ..	185,894	133,629	132,640	50,652	Dr. 599

(a) Includes Federal Capital Territory.
year only, see letterpress above.

(b) Includes Northern Territory.

(c) Portion of

The total collections representing arrears of tax from previous years amounted to £13 in 1935-36 and to £107 in 1936-37.

(f) *War Time Profits Tax.* This tax which came into force in September, 1917, provided for a tax on the amount by which the profits made in war time exceed the pre-war standard of profits. Further details regarding its application are given in Official Year Book No. 22, 1929. The net collections, after allowing for refunds, for the five years ended 30th June, 1937, are as follows :—

1932-33, £1,665; 1933-34, £1,568; 1934-35, Dr. £17,663; 1935-36, £20,956; and 1936-37, Nil. These collections are in respect of arrears as the Act is now inoperative.

(g) *Sales Tax.* The Sales Tax was imposed in August, 1930, as part of the Budget proposals for the year 1930-31. The rate of tax, which was fixed at $2\frac{1}{2}$ per cent., was expected to yield £6.5 millions (£5 millions for the ten remaining months of the financial year) on an estimated taxable field of sales amounting to £260 millions for the year. The actual field for ten months proved to be £138 millions—equivalent to £157 millions for a full year—and realized net collections of £3,471,837. This lower total of taxable sales largely resulted from the volume of sales of exempted goods. The operation of the tax is controlled chiefly by a system of registration of taxpayers, and all manufacturers and wholesale merchants who are the taxpayers under the Act in respect of goods sold in Australia must be registered with the Department. The tax on imports subject to sales tax is collected by the Customs Department at ports of entry.

The Sales Tax legislation was amended on 5th October, 1932, to remove certain difficulties connected with the administration of the Acts; to extend the list of exemptions designed to assist primary production; and to provide for additional exemptions and abatements. Additional exemptions applicable to goods manufactured in Australia

became effective for the period 11th November, 1932, to 30th June, 1933, with the provision that they may be continued by regulation for a period terminating not later than 30th September, 1933; these temporary exemptions were subsequently made permanent.

Further schedules of exemptions were applicable from 26th October, 1933, 1st August, 1934, 25th October and 7th December, 1935, and 11th September, 1936.

Under the Sales Tax Assessment (New Zealand Imports) Act 1933, the Commonwealth provided that the exemptions from Sales Tax applicable to certain goods of Australian origin only shall extend to similar classes of goods of New Zealand origin.

The rate of tax was increased to 6 per cent. on taxable sales to operate during the year 1931-32. The rate of Sales Tax payable was reduced to 5 per cent. from 26th October, 1933, and to 4 per cent. from 11th September, 1936.

Particulars of the net amount of Sales Tax payable, and the sales of taxable, non-taxable and exempt goods in each State for the year 1936-37 are given in the following table. The figures regarding "Tax payable" are in respect of the periods 1st July to 30th June of each year adjusted on account of rebates of tax allowed in returns to taxpayers as deductions, while those relating to sales are in respect of the periods 1st June to 31st May.

SALES TAX AND AMOUNT OF SALES, 1936-37.(a)

State or Territory.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	75,947	70,678	98,088	69,803	3,017	294	3,311
Victoria ..	65,642	64,738	75,526	60,564	2,629	208	2,837
Queensland ..	21,073	9,973	33,502	19,854	833	60	893
South Australia ..	13,349	11,020	21,060	12,211	528	38	566
Western Australia ..	8,793	4,186	16,759	9,512	412	33	445
Tasmania ..	2,621	1,449	6,245	2,492	103	11	114
Northern Territory	8	2	40	7	..	..	..
Total ..	187,433	162,046	251,820	174,443	7,522	644	8,166

(a) The difference between the amount of tax collected and the amount of tax calculated at the ruling rate on the net amount of sales on which tax was payable is due to rebates allowed as deductions from tax without the corresponding deduction from "Net Sales".

Similar details for each year since the inception of the tax in 1930-31 are given in the following table:—

SALES TAX AND AMOUNT OF SALES, 1930-31 TO 1936-37.

Year.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1930-31 ..	145,805	102,663	170,434	138,756	3,179	203	3,472
1931-32 ..	156,608	119,971	189,634	147,730	7,931	501	8,432
1932-33 ..	158,469	135,843	195,285	147,217	8,797	594	9,391
1933-34 ..	162,852	135,877	191,370	150,614	8,166	540	8,706
1934-35 ..	170,256	140,735	202,320	156,791	7,967	614	8,581
1935-36 ..	188,228	156,602	219,756	174,312	8,779	703	9,482
1936-37 ..	187,433	162,046	251,820	174,443	7,522	644	8,166
Total ..	1,169,651	953,827	1,420,619	1,089,863	52,341	3,889	56,230

It should be mentioned that the figures given in the foregoing tables do not represent the total sales of all commodities, as vendors trading in exempt goods only are not required to be registered and consequently the volume of their sales is not included in the above statistics.

(h) *Flour Tax.* In connexion with the Government's decision to provide £3,000,000 for assistance to necessitous wheat farmers who did not during 1932-33 receive income which was subject to Commonwealth Income Tax, the Flour Tax Act was passed in December, 1933. The rate of tax imposed was £4 5s. per short ton on all flour sold or delivered by a miller; imported into Australia; used in the manufacture of goods imported into Australia; or held in stock by a person other than a miller. The Act, which originally operated from 4th December, 1933, and terminated on 31st May, 1934, was expected to yield £1,600,000. The Flour Tax, with a reduction in the rate to £2 12s. 6d. per short ton, was reimposed from 7th January, 1935, and was terminated by proclamation on 24th February, 1939. Net collections after allowing for refunds made and outstanding were as follows:—

FLOUR TAX.

State.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£
New South Wales	532,538	311,991	450,785	Dr. 8,744
Victoria	362,633	226,163	320,770	Dr. 465
Queensland	165,898	80,999	153,994	Dr. 1,074
South Australia	99,916	66,990	98,580	Dr. 283
Western Australia	86,992	50,059	80,873	Dr. 1,623
Tasmania	37,503	25,504	40,468	Dr. 4
total	1,285,480	761,706	1,145,470	Dr. 12,193

(i) *Wool Tax.* The Wool Tax Acts assented to in May, 1936, provide for a levy on all wool grown in Australia and shorn on or after 1st July, 1936. The tax is collected through wool-brokers and dealers who furnish quarterly returns on which the tax is assessed. Tax is payable prior to export on wool not previously taxed in the hands of a broker or dealer. The rates applicable to the 1936-37 wool clip were:—6d. per bale; 3d. per fadge or butt; and 1d. per bag.

The collections in 1936-37 were:—

State.	1936-37.
	£
New South Wales	32,616
Victoria	15,778
Queensland	11,970
South Australia	6,462
Western Australia	4,768
Tasmania	1,211
Total	72,805

(j) *Taxation Legislation.* A Royal Commission was appointed by the Commonwealth Government in October, 1932, to inquire into and report upon the simplification and standardization of the taxation laws of the Commonwealth and of the States so far as

they relate to similar subject matters of taxation, e.g., income tax, land tax and death duties, and to make recommendations regarding uniformity in legislation and procedure. Four reports covering the field of inquiries were presented and as the result of subsequent conferences between the authorities concerned a substantial degree of legislative uniformity has been attained. It is intended to hold regular conferences in the future to ensure the maintenance of uniformity.

3. *Business Undertakings.*—(i) *Postal Revenue.* Particulars concerning this branch of revenue for each of the financial years from 1932-33 to 1936-37 are contained in the following table:—

COMMONWEALTH POSTAL REVENUE.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Private boxes and bags ..	63,307	64,850	66,298	68,488	70,589
Commission—					
Money orders and postal notes	216,837	233,889	248,211	265,999	268,860
Telegraphs	1,091,823	1,136,928	1,260,388	1,289,772	1,370,518
Telephones	5,445,838	5,647,972	6,027,517	6,521,747	7,061,245
Postage	5,116,052	5,349,776	5,640,159	5,933,884	6,170,144
Radio receipts	210,134	336,857	338,593	365,877	429,047
Miscellaneous	449,601	358,899	363,764	393,277	416,214
Total	12,593,592	13,129,171	13,944,930	14,839,044	15,786,617

The foregoing particulars do not include repayments of States' proportion of pensions or contribution of officers towards pensions under State Acts.

Further particulars of Postal Revenue are given in Chapter V.—Transport and Communication.

(ii) *Railway Revenue.* The Commonwealth Government is responsible for four lines—the Trans-Australian, the Central Australian, the North Australian and the Federal Capital Territory lines. The appended table shows the amounts paid into the credit of the Consolidated Revenue Fund on account of each of these railways for the last five years:—

COMMONWEALTH RAILWAY REVENUE.

Railway.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Trans-Australian	187,043	205,052	215,012	248,939	270,161
Central Australian	86,938	94,444	80,985	98,634	122,698
North Australian	22,149	27,714	38,352	39,050	30,440
Federal Capital Territory ..	4,858	4,530	83	5,379	6,994
Total	300,988	331,740	334,432	383,608	436,293

The decrease in receipts of the Federal Capital Territory Railway in 1934-35 was due to different accounting methods.

Further particulars are given in Chapter V., part B, Railways.

4. **Other Sources of Revenue.**—The most important investments of the Commonwealth Government from which interest is derived are—Loans to States, General Trust Funds, Loans placed in London, Fixed Deposits with the Commonwealth and other Banks, and certain advances. In 1930-37 the total included interest received from British Government on Development and Migration Loans and advances for miscellaneous purposes, payable by States; Interest on General Trust Fund Investments; Interest, Nauru Island Agreement; repayments of principal and interest in respect of War Service Homes advances; and repayment of advances to the States for the benefit of Settlers. As previously mentioned, the "Balance of Interest on States' Debts" payable by States under the Financial Agreement has not been included in the "Grand Total" in the detailed statement.

Division III.—Expenditure.

1. **Nature of Commonwealth Expenditure.**—The disbursements by the Commonwealth Government of the revenue collected by it fell naturally, under the "book-keeping" system, into three classes, viz. :—

- (a) Expenditure on transferred services;
- (b) Expenditure on new services; and
- (c) Payment to States of surplus revenue;

Of these three, only the first two were actual expenditure, the last being merely a transfer, the actual expenditure being incurred by the States. In accordance with the provisions of the Constitution, the expenditure on transferred services was, under the "book-keeping" system, debited to the several States in respect of which such expenditure was incurred, while the expenditure on new services was distributed *per capita*. Surplus Commonwealth revenue was paid to the States monthly. Until the end of the year 1903-4, new works, etc., for transferred departments were treated as transferred expenditure, and were charged to the States on whose behalf the expenditure had been incurred. In subsequent years all such expenditure was regarded as expenditure on new services, and distributed amongst the States *per capita*. Under the arrangement which superseded the "book-keeping" system, a specific subsidy of 25s. per head of population was made annually by the Commonwealth to the States, and there was no further debiting of expenditure to the several States. The States Grants Act 1927 provided for the abolition of the *per capita* payments as from 30th June, 1927. From 1st July, 1928, the temporary provisions of the agreement between the Commonwealth and the several States under the Financial Agreement Act 1928 were operative, and on 1st July, 1929, the Commonwealth Government took over the debts of the States under this agreement which was ratified by all Governments concerned. This agreement (except the temporary provisions) has been incorporated in Chapter I.

The Financial Emergency Act 1931 provided for a reduction of internal interest by 22½ per cent., and of 20 per cent. on salaries and wages of Government employees and on war pensions, and of 12½ per cent. on old-age pensions. The subsequent Financial Relief Acts restored the reductions of salaries and pensions in addition to reducing the rates of Income Tax, Land Tax and Sales Tax, etc. More complete details regarding the steps taken to reduce expenditure and balance the budget and of later restorations are given in the Appendix. (See Financial Crisis.)

2. **Details of Expenditure from Consolidated Revenue.**—(i) *General.* The following table gives details of the expenditure from Consolidated Revenue during the last five years. The "Balance of Interest on States' Debts" (recoverable from the States) is placed at the foot of the table, but is not included in the "Grand Total" therein. Details for each Department, as constituted at 30th June, 1937, are stated hereafter.

Administrative changes involving the amalgamation of certain departments and the transfer of some services from one department to another which were effected in April, 1932, are referred to in the paragraphs relating to the departments concerned.

* For an exposition of the "book-keeping system" see Official Year Book No. 6, page 780.

COMMONWEALTH EXPENDITURE FROM CONSOLIDATED REVENUE.

Departments, &c.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Departments—	£	£	£	£	£
Governor-General	25,401	27,225	28,026	28,240	34,245
Parliament	345,532	357,204	487,983	390,120	503,287
Prime Minister	1,439,371	1,540,788	1,570,765	1,314,105	1,270,516
External Affairs	(g)	(g)	(g)	70,339	63,104
Treasury (d)	2,256,959	2,414,742	(f) 2,615,881	(f) 2,277,642	(f) 1,952,865
Attorney-General	197,070	207,279	223,258	239,702	252,150
Interior	970,862	987,333	1,014,178	1,267,482	(h) 972,733
Defence—					
Military	1,456,441	1,683,514	1,909,295	2,007,550	2,160,338
Naval	1,589,185	1,699,110	1,651,853	2,258,796	2,520,004
Air	475,132	489,872	599,295	653,442	1,224,234
Trade and Customs	911,946	797,421	881,064	878,762	891,292
Health	1,542,535	1,541,335	1,600,001	2,000,000	2,144,443
Commerce	763,058	888,133	958,293	972,246	1,114,930
Total, Departments	10,594,383	11,268,957	12,434,474	12,623,355	13,569,075
Business Undertakings—					
Postmaster-General	11,703,098	11,422,679	12,015,696	12,523,876	13,203,176
Railways	1,016,715	1,066,000	1,100,222	1,017,968	1,000,000
Total, Business Undertakings ..	12,719,813	12,488,685	13,176,518	13,540,844	14,279,253
Territories—					
Federal Capital Territory	585,005	534,017	530,708	566,286	585,869
Northern Territory	145,013	154,683	165,369	190,832	262,113
Papua	52,136	67,369	69,100	68,509	55,821
New Guinea	2,740	2,089	3,578	3,308	13,431
Norfolk Island	3,500	3,000	3,000	7,200	4,409
Total, Territories	788,394	762,058	780,905	836,136	921,643
Additions, New Works, Buildings, etc.	874,390	1,443,693	1,052,133	3,237,317	4,319,562
War and Repatriation (b)	19,121,967	19,154,363	19,017,861	18,241,399	18,723,053
Invalid and Old-age Pensions	10,771,061	10,963,090	11,702,030	12,797,720	13,990,793
Maternity Allowances	320,986	302,928	329,321	335,552	370,150
Payments to or for States—					
Interest on States' Debts	7,584,912	7,584,912	7,584,912	7,584,912	7,584,912
Sinking Fund on States' Debts	1,188,522	1,289,819	1,330,910	1,359,880	1,416,548
Special Grants	1,830,000	2,130,000	2,400,000	2,750,000	2,430,000
Federal Aid Roads	1,922,048	2,207,683	2,465,980	2,778,800	3,039,530
Other Grants .. ..	..	..	..	100,000	551,000
Total to or for States (c)	12,525,482	13,212,414	13,781,802	14,573,691	15,021,990
Relief to Primary Producers	2,249,692	3,044,195	4,322,856	2,449,597	327,000
Grand Total	60,906,201	72,040,383	76,657,900	78,635,621	81,531,419
Per head of Population	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Excess Receipts (d)	10 11 11	10 18 4	11 8 9	11 12 11	11 19 8
	3,546,608	1,301,570	711,205	3,567,720	1,276,558
Balance of Interest on States' Debts—payable by States ..	25,713,350	25,180,072	24,300,832	24,786,646	25,081,605

(a) Excludes Invalid and Old-age Pensions and Maternity Allowances. (b) For details see § 5
(c) Excludes balance of interest payable on States' Debts (re-convertible from States). (d) Appropriated
for payment of Invalid and Old-age Pensions in following year. (e) Omitting payments from
accumulated excess receipts of prior years (see page 869). (f) Includes expenditure under Works
and Services Act. (g) Included with Prime Minister's Department. (h) Excludes interest
(payable by States) on loans for Development and Migration (Prime Minister's Department) and for
Grafton-South Brisbane Railway (Department of the Interior) now included under "Balance of
Interest on States' Debts". See note (f) to table on page 870.

The items included under the above general heads are referred to in some detail later. Particulars for each department do not include the expenditure on new works which is given in (iii) (a) below.

(ii) *Cost of Departments.*—(a) *Governor-General.* Section 30 of the Constitution enacts that, until the Commonwealth Parliament otherwise provides, there shall be payable out of the Consolidated Revenue Fund for the salary of the Governor-General an annual sum of ten thousand pounds, and a proviso is made that the salary of the Governor-General shall not be altered during his continuance in office. The expenditure in connexion with the Governor-General and establishment for the five years 1932-33 to 1936-37 was as follows:—

EXPENDITURE.—GOVERNOR-GENERAL AND ESTABLISHMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Salary	(b) 8,900	(b) 8,900	9,775	9,882	10,000
Governor-General's Establishment ..	9,962	11,878	11,825	10,773	13,641
Contingencies (a)	2,101	1,984	2,135	3,266	5,913
Interest and Sinking Fund	4,438	4,463	4,291	4,319	4,691
Total	25,401	27,225	28,026	28,240	34,245

(a) Represents official services outside the Governor-General's personal interests, and carried out mainly at the instance of the Government. (b) Voluntary reduction.

(b) *Parliament.* Under this head have been grouped all the items of expenditure connected with the parliamentary government of the Commonwealth for the last five years. Although the administration of the Electoral Act and the conduct of elections come within the functions of the Department of the Interior, the expenditure in connexion therewith is fundamentally incurred on account of the parliamentary government system, and for that reason is included herein.

EXPENDITURE.—COMMONWEALTH PARLIAMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Salaries of Ministers	10,997	11,730	12,240	13,260	15,130
Allowances to Senators	27,115	28,363	28,962	29,549	32,617
Allowances to Members of House of Representatives	56,863	59,164	59,401	61,685	67,283
Officers, staff, contingencies, etc.	56,173	54,261	55,674	59,101	61,591
Rent, repairs, maintenance, etc.	7,443	8,395	12,002	10,962	12,601
Printing	22,404	15,227	21,527	23,075	19,000
Travelling expenses of Members and others	25,833	25,722	27,610	28,968	30,472
Electoral Office	73,334	74,386	83,252	79,375	81,357
Election expenses .. .. .	..	1,047	103,439	611	100,042
Administration of Electoral Act ..	17,315	13,262	15,187	18,017	28,232
Interest and Sinking Fund	38,505	38,178	37,937	42,243	38,283
Miscellaneous	9,550	27,469	30,745	23,274	18,679
Total	345,532	357,204	487,985	390,120	505,287

In section 66 of the Constitution provision is made for the payment from Consolidated Revenue of an annual sum for the salaries of Ministers, and section 48 specifies the amount of the allowance to each Senator and each Member of the House of Representatives. These amounts, together with subsequent increases and reductions under Financial Emergency legislation, will be found on pages 9 and 12 of this issue.

(c) *Prime Minister's Department.* This Department was created during the financial year 1911-12. In addition to the services indicated below, this Department administers the external Territories of New Guinea, Papua, Nauru and Norfolk Island. For convenience, particulars of expenditure on account of these Territories are shown hereinafter under that heading. Figures for 1932-33 to 1934-35 include expenditure in respect of those functions now administered by the External Affairs Department. The expenditure for the last five years is shown in the following table:—

EXPENDITURE.—PRIME MINISTER'S DEPARTMENT.(a)

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Salaries, contingencies and miscellaneous	£ 202,124	£ 151,217	£ 246,671	£ 198,215	£ 239,259
Audit Office	29,405	30,817	34,278	38,061	36,587
Rent, repairs, etc.	8,039	7,194	7,441	9,373	7,981
Public Service Board's Office ..	34,517	35,880	38,200	42,185	49,825
High Commissioner's Office ..	47,661	51,577	48,629	54,523	59,217
Commissioner for Australia in United States of America ..	5,196	5,073	5,945	6,691	7,306
Interest and Sinking Fund ..	974,040	978,644	914,931	790,516	679,279
Mail Service, Pacific Islands ..	41,000	40,997	41,000	40,000	40,700
Secretariat, League of Nations ..	50,323	52,553	54,024	(d)	(d)
Scientific and Industrial Research ..	(b) 30,902	(b) 38,599	(b) 99,830	120,085	140,534
Pensions and Superannuation ..	7,164	8,237	7,804	7,856	9,828
Assistance to Migrant Settlers(c) ..	..	100,000	..	..	..
North Australia Survey ..	..	..	75,000	..	..
Total	1,430,371	1,540,788	1,570,765	1,314,105	1,270,516

(a) Excluding Territories, see page 889.
and £94,815 in 1934-35 for Investigations.

(b) Includes £29,000 in 1932-33, £76,619 in 1933-34 and £94,815 in 1934-35 for Investigations.

(c) To be recovered from Victoria.

(d) Included under External Affairs Department.

(e) See note (h) to table on page 882.

(d) *Department of External Affairs.* The Department of External Affairs was dissociated from the Prime Minister's Department in 1935-36. Its functions include, *inter alia*, communications with British diplomatic missions and consulates on political matters, foreign affairs, inter-Imperial and Dominion political relations, treaties and international agreements, and League of Nations matters, etc. Expenditure for the years 1935-36 and 1936-37 are given in the following table:—

EXPENDITURE—EXTERNAL AFFAIRS.

Particulars.	1935-36.	1936-37.
Salaries and General	£ 7,827	£ 12,417
Contribution, League of Nations Secretariat ..	52,687	42,929
Miscellaneous	9,825	7,758
Total	70,339	63,104

Expenditure during the preceding three years on similar services included under the Prime Minister's Department were:—1932-33, £73,450; 1933-34, £65,512; and 1934-35, £70,339.

(c) *Department of the Treasury.* The sub-departments under the control of the Commonwealth Treasurer are the Treasury, the Pensions Department, the Taxation Office, the Supply and Tender Board, the Superannuation Fund Management Board,

and the Bureau of Census and Statistics which was transferred from the Department of Home Affairs on 13th April, 1932. Details of the expenditure of this Department for the last five years are given in the following table:—

EXPENDITURE.—DEPARTMENT OF THE TREASURY.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Treasury	45,233	48,856	48,336	49,678	50,808
Taxation Office	480,066	510,143	521,171	547,751	579,629
Pensions Office	87,390	102,750	117,348	123,089	125,084
Maternity Allowance Office	12,122	11,729			
Census and Statistics	24,609	24,119	26,736	30,022	37,021
Census	137,224	64,357	37,846	23,932	16,207
Coinage	19,526	22,604	..	..	..
Rent, repairs, etc.	14,867	14,198	12,569	16,841	18,006
Interest and Sinking Fund	639,338	688,674	785,595	775,388	601,695
Exchange	713,537	723,851	722,006	637,998	445,197
Loan Conversion expenses	..	51,161	111,294	8	..
Miscellaneous	83,047	(a) 152,300	(b) 232,980	(b) 72,940	(b) 84,378
Departmental Expenditure	2,256,959	2,414,742	2,615,881	2,277,647	1,958,085
Invalid and Old-age Pen- sions (c)	10,771,061	10,963,090	11,762,030	12,797,726	13,998,793
Maternity Allowance	320,986	302,928	329,321	335,552	370,150
Total	13,349,006	13,680,760	14,707,232	15,410,925	16,327,028

(a) Includes £62,744 to be recovered from Victoria in respect of interest on Soldier Land Settlement loans. (b) Includes £161,153, £12,219 and £2,581 under Works and Services Act in 1934-35, 1935-36 and 1936-37 respectively. (c) Includes maintenance of pensioners in charitable institutions.

(f) *Attorney-General's Department.* Prior to April, 1932, the Attorney-General was also Minister for External Affairs, but the expenditure of the latter department is included in that of the Prime Minister's Department. The Bankruptcy Administration was created in 1927-28. Details for the five years 1932-33 to 1936-37 are furnished hereunder:—

EXPENDITURE.—ATTORNEY-GENERAL'S DEPARTMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Attorney-General's Office	15,333	16,252	19,114	20,179	22,985
Crown Solicitor's Office	21,635	22,526	23,670	24,322	26,712
Salaries of Justices of High Court	18,500	18,500	18,500	18,417	18,500
High Court expenses	10,233	11,324	13,198	14,540	14,308
Court of Conciliation and Arbitration	17,875	18,220	19,236	19,748	19,593
Public Service Arbitrator's Office	2,721	2,673	2,751	3,031	3,501
Rent, repairs, etc.	21,113	18,160	18,652	19,523	18,333
Patents, Trade Marks, etc.	39,008	43,773	44,006	53,285	59,346
Investigation Branch	9,246	9,915	10,809	11,537	11,817
Bankruptcy	28,279	31,549	36,255	36,281	37,838
Reporting Branch	8,715	10,256	10,721	7,874	8,572
Miscellaneous	4,412	4,131	6,346	10,965	10,653
Total	197,070	207,279	223,258	239,702	252,158

(g) *Department of the Interior.* In April 1932, the Departments of Home Affairs and Works were abolished, and the services under the control of these departments were

assumed by a new Department styled the Department of the Interior. The Bureau of Census and Statistics, formerly under the Department of Home Affairs, was, however, transferred to the Department of the Treasury. The Commonwealth Railways and the Northern and Federal Capital Territories, which are administered by the Department of the Interior, are for convenience respectively included under Railways (*m*) and Territories (*n*) hereinafter. The Electoral Office was previously attached to the Department of Home Affairs, but, as was the case in previous years, the expenditure of this branch is included under Parliament, in (*b*) *ante*.

Particulars of the expenditure for the last five years on services under the control of this Department are as follows:—

EXPENDITURE.—DEPARTMENT OF THE INTERIOR.(a)

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Salaries, Contingencies and Miscellaneous—	£	£	£	£	£
Administrative ..	79,695	93,532	120,736	155,956	175,048
Meteorological Bureau ..	30,762	31,832	38,178	38,413	44,455
Solar Observatory ..	4,552	4,639	5,006	5,354	5,600
Forestry Branch ..	5,173	5,319	5,571	5,670	6,922
Rent, Repairs and Maintenance ..	11,456	11,040	12,213	13,691	16,930
Pensions and Retiring Allowances (<i>b</i>) ..	14,353	16,570	18,220	18,725	19,069
Petroleum Prospecting ..	4,550	4,850	1,500	250,500	2,800
Interest ..	769,002	764,506	754,634	713,363	(c) 639,109
Sinking Fund ..	51,299	55,045	57,820	59,810	62,800
All Other ..	20	..	300	..	..
Total ..	970,862	987,333	1,014,178	1,267,482	972,733

(a) Excludes Territories, Railways and Electoral Office. (b) Includes Superannuation.
(c) See note (*h*) to table on page 882.

(h) *Defence.* The expenditure in connexion with defence for the last five years was as follows:—

EXPENDITURE.—DEPARTMENT OF DEFENCE.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Defence—Chief Office ..	£	£	£	£	£
Military ..	19,825	18,898	19,831	21,892	29,785
Audit (Proportion) ..	1,111,740	1,337,294	1,530,813	1,614,743	1,928,415
Pensions and Retiring Allowances (<i>a</i>) ..	4,567	4,702	5,310	5,010	5,678
Rent, Repairs, etc. ..	33,270	40,284	43,026	44,107	45,610
Interest and Sinking Fund ..	30,050	27,084	44,508	45,889	60,470
Exchange ..	238,378	244,377	235,000	220,412	229,301
Miscellaneous ..	4,160	4,425	29,697	..	..
	7,542	6,390	..	48,861	152,073
Total ..	1,456,441	1,683,514	1,909,293	2,007,550	2,460,338
Navy—Chief Office ..					
Naval ..	1,470,126	1,541,573	1,820,623	2,038,439	2,311,159
Audit (Proportion) ..	..	..	..	..	..
Pensions and Retiring Allowances (<i>a</i>) ..	1,957	2,053	2,288	2,538	2,134
Rent, Repairs, etc. ..	3,441	3,491	3,477	4,053	4,302
Interest and Sinking Fund ..	15,213	16,503	21,018	22,800	26,004
Exchange ..	82,244	83,241	77,754	73,868	88,862
Miscellaneous ..	9,274	39,164	28,793	113,091	146,983
	3,930	5,085	..	..	..
Total ..	1,586,185	1,691,110	1,954,853	2,254,799	2,580,704

EXPENDITURE.—DEPARTMENT OF DEFENCE—*continued.*

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Civil Aviation—					
Salaries and General	18,156	24,679	32,305	40,686	53,320
Development of Civil Aviation ..	99,472	93,921	76,235	52,875	211,032
Rent, Repairs and Maintenance ..	6,487	1,924	2,273	3,573	5,948
Interest and Sinking Fund	3,263	3,274	3,270	5,137	5,263
Other	1,064	472	..	..	..
Total	128,442	124,270	114,083	102,271	275,563
R.A.A.F.—					
Pay, etc.	307,442	323,793	426,671	472,892	677,073
General Contingencies					
General Stores and Maintenance ..					
Rent, Repairs, etc.					
Interest and Sinking Fund	21,013	21,808	21,775	23,000	24,745
Exchange .. ..	..	2,935	18,366	25,321	219,444
Miscellaneous	8,096	3,593	607	4,504	4,673
Total	346,690	365,602	485,212	551,171	948,671
Total	475,132	489,872	599,295	653,442	1,224,234
Grand Total	3,517,758	3,864,496	4,463,443	4,915,791	6,265,276

(a) Includes Superannuation.

(i) *Trade and Customs Department.* Under this head have been included the expenditure of all the sub-departments under the control of the Minister for Trade and Customs, in addition to the amounts payable as bounties and the expenses in connexion therewith. Particulars for the five years 1932-33 to 1936-37 are given in the following table :—

EXPENDITURE.—TRADE AND CUSTOMS DEPARTMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Chief Office	51,247	54,700	58,692	64,745	79,706
Customs—Ordinary	427,104	450,886	485,833	520,036	553,310
Audit (Proportion)	8,917	9,355	10,425	11,610	11,086
Pensions and Superannuation ..	40,689	41,861	44,491	44,947	45,548
Rent, Repairs, etc.	4,766	7,120	9,918	11,493	10,872
Bounties	343,193	175,714	207,258	175,422	153,878
Interest and Sinking Fund	34,721	34,893	35,078	35,358	31,418
Miscellaneous	1,309	22,892	30,269	15,151	5,474
Total	911,946	797,421	881,964	878,762	891,292

(j) *Health Department.* This department came into existence in the financial year 1921-22. The Minister for Health also administers the Department of Repatriation, but

the expenditure on Repatriation is included under War Services. Details of expenditure for the last five years are as follows :—

EXPENDITURE.—HEALTH DEPARTMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Central Administration ..	24,356	26,459	29,765	33,227	37,973
States, Salaries, Contingencies, etc.	68,534	71,691	74,513	79,368	83,621
Interest	17,760	17,716	18,348	18,816	19,235
Sinking Fund	2,239	2,351	2,512	2,681	2,825
Rent and repairs	9,420	8,373	8,628	9,914	13,380
Subsidy, Cattle Tick Control	44,450	44,450	45,100	54,450	48,350
Miscellaneous	8,667	13,296	11,815	(a) 70,465	36,959
Total	175,426	184,336	190,681	268,921	241,443

(a) Includes grant, maternal and infant welfare £50,000.

Items included in "Miscellaneous" are subsidies in connexion with the control of venereal diseases and tuberculosis, maternal and infant hygiene, Health Research Council, and grants in aid of research, etc.

(k) *Department of Commerce.* The Department of Commerce was created in April, 1932, by the amalgamation of the Departments of Markets and of Transport. Commonwealth Railways, formerly administered by the Minister for Transport, were transferred to the control of the Minister for the Interior on the amalgamation in 1932. Some details relating to the creation of the Departments of Markets and Transport are given in Official Year Book No. 25, pp. 295-6. Particulars of the expenditure of the Department of Commerce for the last five years are given below :—

EXPENDITURE.—DEPARTMENT OF COMMERCE.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Salaries, Contingencies and Miscellaneous—					
Administrative ..	65,228	66,141	29,797	41,918	45,042
Marine	195,667	189,762	201,539	206,199	206,199
Administration of Commerce Act	53,583	58,667	116,166	127,039	141,313
Oversea Trade Publicity ..	..	..	15,000	25,000	37,500
Commercial Intelligence Abroad	2,945	4,350	10,724	27,660	25,508
Wool Publicity and Research Assistance Marketing Primary Produce	16,000	15,000	..	(b) 15,808	(b) 189
Assistance to Fruit Growers .. ..	..	125,000	(a) 135,000	..	..
Fruit Bounties .. ..	..	..	..	74,300	124,566
Rent, Repairs, Maintenance, etc.	5,510	5,652	5,934	6,189	6,782
Pensions and Retiring Allowances	5,516	8,539	9,695	10,544	10,778
Interest	210,935	178,583	180,534	170,583	191,926
Sinking Fund	183,095	192,262	201,892	211,989	222,589
All Other	24,579	44,177	52,012	55,017	38,003
Total	763,058	888,133	958,293	972,246	1,114,936

(a) Includes £20,000 relief for Mandarin Growers.

(b) To Citrus industry.

(l) *Postmaster-General's Department.* Details of the expenditure of this Department for the last five years are given in the table hereunder :—

EXPENDITURE.—POSTAL DEPARTMENT.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Salaries, Stores and Materials, Mails, etc.	7,930,900	8,048,760	8,430,612	9,205,416	9,737,607
Audit (proportion)	9,800	9,700	9,920	10,140	10,650
Pensions and retiring allowances	112,124	95,232	91,665	90,380	86,029
Superannuation	170,273	215,416	242,611	260,975	283,958
Rents, repairs, etc.	73,108	77,693	103,071	103,805	131,693
Interest	1,872,934	1,702,183	1,694,466	1,523,057	1,498,967
Sinking Fund	818,084	859,618	920,899	971,566	1,023,673
Exchange	691,615	389,617	392,727	324,010	370,370
Loan Redemption and Conversion Expenses .. ..	..	6,677	99,090	..	..
Miscellaneous	17,654	17,783	30,635	34,469	60,319
Total	11,703,098	11,422,679	12,015,696	12,523,878	13,203,176

(m) *Railways.* In 1928-29 the Commonwealth Railways were transferred from the Department of Works and Railways to the Department of Markets and Transport. In April, 1932, the administration was placed under the Department of the Interior. The expenditure on railways for the last five years is shown below as distinct from the expenditure of the other services controlled by the latter Department.

EXPENDITURE.—COMMONWEALTH RAILWAYS.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Working Expenses—					
Trans-Australian	197,938	219,614	201,358	198,262	227,515
North Australian	39,007	39,528	42,334	40,908	39,518
Central Australian	108,548	112,136	134,050	138,234	132,859
Federal Capital Territory	4,762	4,917	5,859	5,885	5,809
Interest	460,966	450,178	434,263	427,094	434,916
Sinking Fund	61,066	64,121	67,326	71,494	76,450
Exchange	135,152	81,878	78,533	70,095	68,024
Miscellaneous	9,309	17,194	42,669	14,401	25,986
Sleeper Renewals, Trans-Australian Railway .. ..	..	76,440	154,430	49,995	65,000
Total	1,016,748	1,066,006	1,160,822	1,016,968	1,076,077

Additional details of the financial operations of the Commonwealth Railways are given in Chapter V.—Transport and Communication.

(n) *Territories.* The following table shows the expenditure on account of territorial services for the last five years. The internal territories are administered by the

Department of the Interior, while the Prime Minister's Department controls the external territories. The expenditure has been grouped in one table for convenience:—

EXPENDITURE.—TERRITORIES.

Details.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£	£	£	£	£
Internal—					
North and Central Australia (a)	145,013	154,683	165,369	190,832	262,113
Federal Capital Territory (a)	585,005	534,017	539,798	566,289	585,869
External—					
Papua	52,136	67,369	69,160	68,509	55,821
New Guinea	2,740	2,989	3,578	3,308	13,431
Norfolk Island	3,500	3,000	3,000	7,200	4,409
Total	788,394	762,058	780,905	836,138	921,643

(a) Exclusive of Railways.

(iii) *Miscellaneous.* (a) *New Works.* The expenditure on additions, new works, etc., during the last five years was as follows:—1932-33, £874,390; 1933-34, £1,443,693; 1934-35, £1,052,133 (exclusive of £4,160,000 provided from excess receipts for Defence equipment); 1935-36, £3,237,317; and 1936-37, £4,319,562 (excluding £2,000,000 provided from excess receipts for Defence equipment).

(b) *War Services.* Full details concerning the expenditure from Consolidated Revenue upon War and Repatriation will be found in § 5.

Division IV.—Payments to or for the States.

1. *Introductory.*—In some previous issues of the Official Year Book particulars were given of the obligations imposed on the Commonwealth in the Constitution Act with reference to the payments to be made to the States, and the following statement briefly outlines the principal financial provisions of the Constitution in regard to the distribution of revenues received by the Commonwealth.

2. *Uniform Customs Duties.*—Prior to Federation, State revenues were largely derived from Customs and Excise duties and as the Commonwealth Constitution Act (Sections 86 and 90) transferred exclusively to the Commonwealth this source of revenue it was essential that the Constitution should provide adequate compensation for this loss to the States. Section 88 directed that uniform duties of customs must be imposed within two years after the establishment of the Commonwealth. This section was complied with on the 8th October, 1901, by the introduction of the first Customs Tariff Bill.

3. *Special Western Australian Tariff.*—Section 95 of the Constitution authorized the Western Australian Government for a period of five years after the imposition of the uniform customs duties to impose customs duties on goods passing into that State and not originally imported from beyond the limits of the Commonwealth, such duties to be collected by the Commonwealth.

Provision was also contained in this section for the regulation of the rates of duty.

4. *Distribution of Commonwealth Revenue.*—Broadly, the requirements of the Commonwealth Constitution in regard to the financial relationship between the Commonwealth and the States may be divided into three phases covering definite periods.

(a) 1901 to 1910. This period was covered by Section 87 (known as the "Braddon Clause") which provided that:

"During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on the debts of the several States taken over by the Commonwealth."

The scheme outlined in the Constitution for determining the amount to be paid to the several States is contained in sections 89 and 93, the former of which relates to the period prior to the imposition of uniform duties of customs (as provided in Section 88), the latter to the first five years after the imposition of such duties and thereafter until Parliament otherwise provides. The principle involved was that of crediting each State with the Commonwealth revenue collected in respect of that State, and of debiting it with the expenditure incurred on its behalf in connexion with transferred departments, as well as its share on a "per capita" basis of the "new" expenditure of the Commonwealth. On this account the method of allocation provided by the Constitution has become very generally known as the "book-keeping system". As the imposition of uniform duties of customs and excise throughout the Commonwealth took place on 9th October, 1901, the five years provided for in section 93 expired on 8th October, 1906, and consequently the "book-keeping system" could then be changed at any time by the Commonwealth Parliament.

Section 93 provided that the duties of customs chargeable on goods imported into and duties of excise paid on goods produced or manufactured in one State and consumed in another should be credited to the consuming State. The balance in favour of any State was paid monthly by the Commonwealth.

The Surplus Revenue Act 1908 continued the "book-keeping system" but provided that any excess of receipts over expenditure should be distributed monthly to each State in proportion to their respective populations. This act more clearly defined "transferred" and "new" expenditure.

(b) 1911 to 1927 (Surplus Revenue Acts). The provisions of Section 87 of the Constitution were terminated by the passing of the Surplus Revenue Act 1910 which provided for the following scheme of payments to operate from 1st July, 1910 :—

- (i) The Commonwealth to pay by monthly instalments or apply to the payment of interest on debts of the States taken over by the Commonwealth an annual sum amounting to twenty-five shillings per head of the number of people of the State ;
- (ii) In addition to the above payments all surplus revenue (if any) to be paid to the States in proportion to the number of people.
- (iii) A special payment to be made to Western Australia in monthly instalments of an annual sum of £250,000 in the first year, thereafter progressively diminishing by £10,000 each year. One half of the payments so made to be debited to all of the States (including Western Australia) on a population basis and the amount so debited to be deducted from the amount otherwise payable to each State.

After 1920 and until 1927 the provisions of the several Surplus Revenue Acts continued to govern the payments by the Commonwealth to the States.

(c) 1928 to date (Financial Agreement Act). An Amendment to the Constitution embodied in Section 105A gave effect to the powers conferred on the Commonwealth in Section 105. This amendment included provisions for :—

- (i) taking over the debts of the several States by the Commonwealth ;
- (ii) the payment by the Commonwealth of a fixed annual sum in respect of the interest on such debts and for certain sinking fund contributions ;
- (iii) the indemnification of the Commonwealth by the States in respect of debts taken over from the States ;
- (iv) the borrowing of money by the States or by the Commonwealth or by the Commonwealth for the States ; and
- (v) certain other matters connected with the management, consolidation, renewal, conversion and redemption of such debts.

5. **Special Grants.**—The Constitution provides in Section 96 for the granting of special financial assistance to the States. Reference has already been made herein to the special grant to Western Australia in the Surplus Revenue Act 1910. This State has continued to receive financial assistance each year since 1910-11. In 1912, a grant under similar conditions was made to Tasmania ; the amount payable in the first year, 1912-13, was £95,000 which was to be progressively reduced by £10,000 in each successive

year. The Tasmania Grant Act 1913 provided for an addition to this grant bringing the amount payable to £85,000 per annum to the year 1921-22 after which annual grants of varying magnitude were made.

South Australia received £360,000 in 1929-30 and further grants in each successive year.

Other direct grants to the States from consolidated revenue include contributions towards the payment of interest and sinking fund on loans expended by Local Government authorities on public works, and for unemployment relief which covers *inter alia*, metalliferous mining and forestry. Grants which have been made from time to time from loan fund are indicated in the statement of loan expenditure on page 895.

From the accumulated excess receipts since 1931-32, special assistance to the States was provided as follows:—

State.				1934-35.	1935-36.	1936-37.
				£	£	£
New South Wales	..	..	..	786,000	205,000	197,000
Victoria	..	..	..	550,000	140,000	137,000
Queensland	..	..	..	286,000	75,000	72,000
South Australia	..	..	..	176,000	45,000	44,000
Western Australia	..	..	..	133,000	35,000	33,000
Tasmania	..	..	..	69,000	..	17,000
Total	..	..	..	2,000,000	500,000	500,000

6. **Commonwealth Grants Commission.**—In 1933, the Commonwealth Government appointed the Commonwealth Grants Commission of three members to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto.

Applications were received from the States of South Australia, Western Australia and Tasmania during each year from 1933 and the recommendations of the Commission were as follows:—

State.				Grant Recommended.			
				For 1934-35.	For 1935-36.	For 1936-37.	For 1937-38.
				£	£	£	£
South Australia	..	..	..	1,400,000	1,500,000	1,330,000	1,200,000
Western Australia	..	..	..	600,000	500,000	500,000	575,000
Tasmania	..	..	..	400,000	450,000	600,000	575,000

7. **Grants for Road Construction.**—(i) *Main Roads Development Acts.* Grants amounting in the aggregate to £1,750,000 were made to the States in 1922-23, 1924-25 and 1925-26 for the purpose of reconditioning certain main roads. £1,500,000 of this amount was on the basis of the expenditure by the States of an equivalent amount.

(ii) *Federal Aid Roads.* The Federal Aid Roads Act 1926 made provision for the construction and re-construction of roads in the several States out of moneys provided by the Commonwealth and States respectively. The original arrangement provided for a grant by the Commonwealth of £2,000,000 per annum for ten years from 1st July, 1926. The allocation to the States was based on three-fifths according to population and two-fifths according to area.

Expenditure was made in the proportion of 15s. by the States to £1 by the Commonwealth. The original agreement has been varied in certain respects, the most important of which operated from 1st July, 1931, when in lieu of the £2,000,000 per annum, the Commonwealth agreed to contribute an amount equivalent to 2½d. per gallon

customs duty, and 1½d. per gallon excise duty on petrol entered for home consumption during each year, and the States were not required to make any contribution as formerly agreed upon.

The 1926 agreement, which was originally intended to remain in operation for ten years, was continued until the 30th June, 1937, when a new agreement was entered into. The latter provided for the continuation of the Federal Aid Roads Agreement for a further period of ten years from 1st July, 1937, increased the amount payable to the States to 3d. a gallon Customs duty and 2d. a gallon excise (except benzol, on which the excise is only 1½d.) on petroleum and shale products, and stipulated that the proceeds of the extra ½d. per gallon should be expended on the construction, reconstruction, maintenance or repair of roads, or other works connected with transport. At the request of the Commonwealth Government the States will, up to a limit of one-twelfth of this additional amount, attend to the maintenance or repair of roads of approach to or adjoining Commonwealth properties. A further variation was the reduction from 3 to 2½ per cent. of the sinking fund contribution of the States on loan moneys provided by them between 1926 and 1931.

8. Amounts Paid.—(a) 1901 to 1937. The table following shows particulars of the amounts paid to each of the States since Federation, divided into the three periods referred to herein with separate details for Special and Roads Grants. Special Commonwealth grants for the relief of primary producers are not included in this table. Details of these grants will be found in Chapter XX.—Agriculture.

PAYMENTS BY THE COMMONWEALTH TO OR FOR THE STATES TO 30th JUNE, 1937.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	All States.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1900-01 to 1909-10 (a) ..	27,606	19,815	8,894	6,148	8,728	2,602	73,793
1910-11 to 1926-27 (b) ..	41,634	31,341	15,184	9,925	6,898	4,368	109,350
1927-28 to 1936-37 (c) ..	33,736	23,687	12,556	8,488	5,943	2,985	87,395
Special Grants (d) ..	..	..	..	8,910	7,950	5,170	22,030
Grants for Road Construction, 1922-23 to 1936-37	7,169	4,676	4,884	2,961	4,987	1,299	25,976
Miscellaneous ..	377	504	174	97	173	76	1,401
Total ..	110,522	80,023	41,692	36,529	34,679	16,500	319,945
Special assistance 1934-35 to 1936-37 (e) ..	1,188	827	433	265	201	86	3,000
Grand Total ..	111,710	80,850	42,125	36,794	34,880	16,586	322,945

(a) Under Section 87 of the Commonwealth Constitution. (b) Under the several Surplus Revenue Acts. (c) Under Financial Agreement Act 1928. (d) Under various State Grants Acts. (e) Provided from excess receipts of the previous years from 1931-32.

(b) 1935-36 and 1936-37. For the years ended 30th June, 1936 and 1937, the payments made to or for each State are given below.

PAYMENTS BY THE COMMONWEALTH TO OR FOR THE STATES, 1935-36. (c)

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
Contributions towards Interest on State Debts ..	2,017,411	2,127,159	1,090,235	703,810	473,432	266,859	7,587,912
Sinking Fund on State Debts (a) ..	562,452	270,413	176,479	165,071	151,247	31,218	1,359,880
Special Grants ..	..	..	..	1,500,000	800,000	450,000	2,750,000
Federal Aid Roads (b) ..	766,976	500,202	522,433	316,794	533,549	138,945	2,778,899
Local Public Works ..	39,400	27,400	14,450	8,700	6,650	3,400	100,000
Total ..	4,286,239	2,925,174	1,809,597	2,694,381	1,964,878	893,422	14,573,691

PAYMENTS BY THE COMMONWEALTH TO OR FOR THE STATES, 1936-37.(c)

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
Contributions towards							
Interest on State Debts ..	2,917,411	2,127,159	1,096,235	703,816	473,432	266,859	7,584,912
Sinking Fund on State Debts (a) ..	589,332	280,645	186,322	167,487	157,015	35,747	1,416,548
Special Grants ..	..	..	..	1,359,000	500,000	600,000	2,430,000
Federal Aid Roads and Works (b) ..	838,910	547,115	571,432	346,506	583,590	151,977	3,039,530
Local Public Works ..	39,400	27,400	14,450	8,700	6,650	3,400	100,000
Metalliferous Mining ..	19,600	27,000	35,600	12,800	31,600	10,400	140,000
Forestry ..	25,000	50,000	15,000	8,500	50,000	12,500	161,000
Unemployment Relief ..	59,200	40,900	21,700	13,000	10,000	5,200	150,000
Total ..	4,488,853	3,100,219	1,940,739	2,599,809	1,815,287	1,086,083	15,021,990

(a) Paid to National Debt Sinking Fund. (b) Paid to Trust Fund. (c) Excludes relief to primary producers. See Chapter XX., § 18.

Payments made to States from excess receipts of previous years since 1931-32 are not included in the foregoing tables.

§ 3. Trust Funds.

The Trust Fund balances on 30th June, 1937 amounted to £24,254,017, as compared with £24,238,402 for the corresponding date in the year 1936.

§ 4. Commonwealth Loan Funds and Public Debt.

1. **General.**—Although it was not until 1915 that the Commonwealth Government came into the loan market as a borrower, there had previously existed a Commonwealth Public Debt which included several items, such as the balance of the debt taken over from South Australia and the amount owing to the States for transferred properties. In view of the large expansion of the Public Debt, and its present importance in Commonwealth public finance, the different items are treated seriatim in the following paragraphs.

2. **Loans taken over from South Australia.**—The first portions of the debt were contracted at the beginning of 1911, when the Commonwealth assumed responsibility for the payment of interest on transferred properties (further dealt with in par. 4) and for the administration and the liabilities of the Northern Territory and the Port Augusta-Oodnadatta Railway. At 30th June, 1911, the debt on account of the former was £3,657,836, and on account of the latter, £2,274,486—a total of £5,932,322. As the securities fall in they are redeemed by the Commonwealth Government, the money required being provided from the National Debt Sinking Fund. At 30th June, 1937, the debt outstanding amounted to £204,758, of which £178,324 was on account of the Northern Territory, and £26,394 on account of the railway.

3. **Loan Fund for Public Works, Redemptions, etc.**—Up to the year 1911 the Commonwealth Government had met its public works expenditure out of revenue. In that year, however, in view of the heavy prospective cost of the Trans-Australian Railway and the Federal Capital Territory, a Loan Fund similar to those of the States was instituted. The initiation of this fund was greatly assisted by the fact that the Treasury at that time held a large quantity of gold, principally on behalf of the Australian Notes Account. Up to 30th June, 1914, the money required for loan expenditure was obtained mainly from this source at 3½ per cent., and inscribed stock of an equivalent value was created. Since the outbreak of war, the money required for the Loan Fund has been mainly obtained by the issue of Treasury Bills and other securities issued in London and

New York as well as in Australia. In 1931-32 and 1932-33, all expenditure on works, other than unemployment relief works, was made from revenue.

COMMONWEALTH EXPENDITURE FROM LOAN FUND.

Particulars.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	Total to 30th June, 1937.
	£	£	£	£	£	£
Works, Buildings, Land, etc.—						
Shipbuilding Yards and Docks ..						733,711
Ship Construction ..	Cr. 821,910	Cr. 469	..	Cr. 120,138	..	7,451,543
F.C.T. Works, Services and Acquisition of Land ..	(c) 100,000	58,764	105,109	152,837	100,583	8,513,834
Northern Territory ..	..	..	7,618	32,025	19,127	169,973
Drill Halls, Stores, Barracks, etc.	..	137,818	2,475	15,426	Cr. 2,877	579,926
Rifles and Ammunition Reserve ..	..	..	..	..	..	315,300
Other Military Services ..	..	..	..	..	..	101,959
Naval Bases, Depots, etc. ..	..	..	Cr. 13,765	2,833	Cr. 12,308	1,514,616
Fleet Construction ..	..	27,635	135,484	116,881	..	935,397
Air Services—						
R.A.A.F. ..	..	..	1,790	1,710	..	469,079
Civil Aviation ..	..	..	20,198	20,273	65	101,741
Buildings and Works, Munitions Production ..	..	..	4,857	11,211	8,530	1,211,600
Lighthouses and Lighthouse Services ..	..	..	..	600	Cr. 3,010	641,490
River Murray Waters Act ..	..	..	..	..	..	2,105,625
Telegraph and Telephone Construction ..	..	..	1,162,415	207,815	300,000	31,695,198
Post Office Buildings and Land Wireless ..	..	..	78,225	16,440	2,193	3,495,612
Serum and Health Laboratories ..	..	..	605	4,462	460	56,236
Other Health Services ..	..	..	8,000	4,005	..	80,149
Repatriation Services ..	..	..	1,468	33,178	1,434	22,064
Railways—						
Trans-Australian ..	..	..	1,197	Cr. 16,249	Cr. 2,770	47,026
North Australian ..	..	..	..	..	..	6,644,476
Central Australian ..	..	..	104	2,639	..	1,597,559
Federal Capital Territory ..	..	..	..	..	..	2,480,596
Grafton—South Brisbane ..	..	..	..	..	..	28,755
Port Augusta—Port Pirie ..	Cr. 5,000	Cr. 2,000	..	Cr. 1,500	..	2,446,005
Other Expenditure ..	..	..	..	122,085	361,011	483,066
Papua—Railways, Wharves, Buildings, etc. ..	..	..	..	..	..	200,000
War Service Homes (L) ..	..	..	..	4,773	..	76,329
London Offices ..	..	..	4,386	10,614	..	7,329,523
Acquisition of Properties not elsewhere included ..	..	..	2	2,728	6,645	880,190
Miscellaneous ..	..	..	2,582	18,923	..	137,911
Assistance to States for—						
Mining ..	..	..	75,000	144,750	64,000	21,505
Unemployment Relief ..	1,155,698	300,161	272,883	363,728	332,880	283,750
Forestry ..	..	..	61,000	223,000	35,000	2,579,222
Roads ..	..	..	..	..	..	322,000
	..	..	..	..	..	249,686
Total, Works, etc. ..	428,788	521,909	1,934,633	1,375,349	1,210,963	85,703,582
Other purposes—						
Loans for Works to External Territories—						
Papua ..	..	..	..	..	..	53,420
New Guinea ..	..	..	..	..	..	40,106
Immigration (a) ..	..	..	..	..	..	1,680,834
Subscription to Capital of Commonwealth Oil Refinery ..	..	..	..	..	..	343,751
Subscription to Capital of Amalgamated Wireless Ltd. ..	..	..	..	..	..	300,000
Advances for Wire and Wire Netting ..	..	..	..	..	..	610,838
Wheat Bounty ..	132,807	257	..	43	..	3,120,571
Farmers' Debt Adjustment ..	..	..	..	317,000	1,500,000	1,817,000
Total Loan Expenditure	561,595	522,166	1,934,633	1,692,392	2,710,963	93,979,192

(a) Exclusive of Loans to States for Immigration purposes. (b) Prior to 1923-24, expenditure amounting to £13,045,408 was made from War Loan Fund. The total loan expenditure to 30th June, 1936, was £20,374,931. (c) Special loan to Federal Capital Commission in 1929-30 by Commonwealth Bank of Australia for housing not previously recorded as expenditure for the Commonwealth.

4. **Properties Transferred from States.**—At the time of federation, when the Commonwealth took over the control of several departments previously administered by the States, a large amount of property was handed over to the Commonwealth Government, which paid interest to the States at the rate of $3\frac{1}{2}$ per cent. on the value of the properties so transferred. (Particulars of the valuation of the properties are given in Official Year Book No. 14, page 694). The temporary provisions of the Financial Agreement between the Commonwealth Government and the Governments of the several States provided, *inter alia*, that, the Commonwealth Government would for the period of two years from 1st July, 1927, pay to each State interest at the rate of 5 per cent. per annum on the agreed value of transferred properties as follows:—New South Wales, £4,788,005; Victoria, £2,302,862; Queensland, £1,560,639; South Australia, £1,035,631; Western Australia, £736,432; and Tasmania, £500,754; a total of £10,924,323.

From 1st July, 1929, the Commonwealth Government assumed all liability for so much of the Public Debt of the States maturing in London bearing interest at the rate of 5 per cent. per annum as is equivalent to the agreed value of the transferred properties shown above. The Commonwealth Government received the freehold or equivalent title to the transferred properties consisting of land or interests in land, and all liability of the Commonwealth to the State in respect of transferred properties was extinguished from that date.

5. **War Loan from the Imperial Government.**—On the outbreak of the European war in 1914, the Commonwealth Government obtained a loan from the Imperial Government for the purpose of financing the prospective large military expenditure. At first, the arrangement was that the Imperial Government should advance the sum of £18,000,000. Subsequently further loans amounting to £31,500,000 were negotiated. In addition to this capital indebtedness of £49,500,000, a further sum of £42,690,500 was due to the British Government for the maintenance of Australian troops.

Early in 1921 an arrangement was concluded with the Imperial Government, by which almost the entire debt (upwards of £92,000,000) was consolidated. The Commonwealth Government undertook to extinguish the debt in about 35 years by annual payments representing 6 per cent. on the original debt, providing for interest at approximately £4 18s. 4d. per cent., and a sinking fund of approximately £1 1s. 8d. per cent. The Imperial Government agreed to suspend for 1931–32 and 1932–33 the repayment of principal moneys due under the Funding arrangement, and under the "Hoover Plan," the payment of interest for the year 1931–32 was also suspended, the suspended payments under the "Hoover Plan" to be liquidated by ten equal annuities running from 1st July, 1933, at a rate of interest to be determined. These annuities are additional to the usual annual payments. Interest payments due in 1932–33 and subsequent years were suspended by arrangement with the British Government. The suspension of interest and sinking fund payments represented an annual saving to the Commonwealth Government of approximately £7,000,000, including exchange. The principal outstanding on 30th June, 1937, was £79,724,220.

6. **Flotation of War Loans in Australia.**—In addition to the advances from the Imperial Government, the Commonwealth Government raised large amounts of money in Australia. Full details of the seven War Loans are given in Official Year Book No. 14.

7. **London Conversion Loans.**—Loans aggregating £22 millions were due for redemption in London in 1932–33, and in addition the Government had optional rights of redemption over a further £88 millions, all of which were carrying an interest burden of 5 per cent. or greater. These obligations, particularly the accumulation of loans with optional rights of redemption, presented some difficulty to the Government and led to the appointment of a Resident Minister in London, who, in conjunction with the Australian Loan Council, arranged for the conversion of Commonwealth and State securities amounting to £109,849,000 between October, 1932, and February, 1934. In

November, 1934, January and July, 1935, and in January and June, 1936, additional conversions were effected of loans maturing and loans with optional rights of redemption aggregating nearly £89 millions. In July, 1937, the £12,361,000 New South Wales 3½ per cent. loan which was the first conversion effected in London after the appointment of the Resident Minister was re-converted at the same rate of interest, issue price, 96½, and redeemable in 1950-52.

Details of the several conversions effected during the period October, 1932, to July, 1937, are given in the following table:—

DETAILS OF LOANS CONVERTED IN LONDON, 1932 TO 1937.

When Converted.	Common- wealth or State.	Amount.	Old Loan.		New Loan.				Annual Saving.	
			Interest Rate (Nominal).	Yield to Investor.	Interest Rate (Nominal).	Price of Issue.	Yield to Investor.	Year of Maturity.	Interest. (a)	Exchange (b)
		£'000.	%	£ s. d.	%	£	£ s. d.		£'000.	£'000.
1932— October ..	N.S.W.	12,361	5½	5 15 0	3½	97½	4 1 2	1936-37	222	56
1933— February ..	N.S.W.	9,622	4	3 19 8	4	100	4 0 0	1955-70	180	45
May ..	N.S.W.	6,427								
	S.A. ..	2,983								
	Tas. ..	2,000	6½	6 10 0	3½	99	3 14 10	1937-38	83	21
July ..	N.S.W.	9,527								
	Qld. ..	2,000								
	S.A. ..	2,978	6	6 9 8	4	99	4 1 10	1943-48	56	14
	W.A. ..	2,716								
September	C'wealth	15,000								
	N.S.W.	4,901	5½	5 16 10	3½	98	3 17 11	1948-53	360	92
	W.A. ..	1,050								
December	N.S.W.	2,981								
	Vic. ..	2,980	5½	5 10 0	3½	99	3 16 9	1946-49	53	14
	S.A. ..	3,907								
	Tas. ..	5,633								
1934— February ..	N.S.W.	1,146	5	5 2 6	3½	97	3 13 8	1954-59	73	19
	Vic. ..	3,979								
	Qld. ..	13,876								
	W.A. ..	3,782	5½	6 6 4	3½	99	3 5 11	1964-74	97	25
November	C'wealth.	83								
	S.A. ..	574								
	Vic. ..	789	3½	3 13 9	3½	99	3 5 11	1964-74	4	1
	W.A. ..	3,078								
	Tas. ..	2,235								
	Vic. ..	4	3½	3 7 1	3½	99	3 5 11	1964-74	23	6
	W.A. ..	2,497								
	Tas. ..	3,745								
1935— January ..	N.S.W.	138	4½	4 5 0	3½	99	3 5 11	1964-74	72	18
	Vic. ..	1,000								
	Qld. ..	1,000								
	S.A. ..	807	5	5 2 8	3½	100	3 5 0	1956-61	316	80
	W.A. ..	1,328								
	Tas. ..	799								
July ..	N.S.W.	1,895	3	3 4 0	3	100	3 0 0	1939-41	4	1
	Vic. ..	200								
	Qld. ..	1,050								
1936— January ..	N.S.W.	12,420	3½	3 12 10	3	95½	3 5 9	1955-58	421	107
June ..	C'wealth.	372								
	N.S.W.	10,955								
	S.A. ..	1,996	3½	3 12 10	2½	99	2 18 6	1941-43	208	53
	W.A. ..	2,631								
	Tas. ..	597								
1937— July ..	N.S.W.	12,361	3½	4 1 5	3½	96½	3 16 2	1950-52	37	9
Total	210,874	4.98	3 0 2	..	98.3	3 11 7	..	3,293	835

(a) Interest savings have been calculated on the yield to the investor worked on the issue prices of the old and new loans respectively. (b) Calculated at 2½ per cent. (c) Approximate average.

Particulars of the total amounts converted to date and the annual savings on account of interest and exchange in respect of the Commonwealth and of each State are as follows :—

Commonwealth or State.	Amount Converted.	Annual Savings.		
		Interest.	Exchange.	Total.
	£	£	£	£
Commonwealth	33,383,401	682,984	173,307	856,291
New South Wales	107,190,706	1,490,057	378,101	1,868,158
Victoria	22,620,392	360,979	91,598	452,577
Queensland	7,109,469	161,157	40,894	202,051
South Australia	48,256,334	275,168	69, 24	344,992
Western Australia	17,830,181	240,308	60,978	301,286
Tasmania	4,483,750	82,786	21,007	103,793
Total	210,874,233	3,293,439	835,709	4,129,148

8. Loan Raisings, 1935-36-37.—Particulars of Loan raisings in Australia during the past two years are given in the following table :—

LOAN RAISINGS, AUSTRALIA, 1935-36 AND 1936-37.

Service.	For—	Rate of Interest.	Year of Maturity.	Price.	Amount.
		%			£
1935-36—					
Conversion (b)	States	3	1939-41	Par.	13,469,981
Works (a)	Commonwealth	3½	1949-50	99½	523,000
	States	3½			7,440,610
Conversion (b)	States	3	1955-58	95½	21,657,000
Conversion (a)	States	3½	1949-50	100	2,393,350
Works (b)	Commonwealth	3½	1951-52	98½	9,018,470
	States	3½			
Works, Redemptions, etc. (c)	States	(d)	(d)	(d)	3,382,640
Conversion (b)	States	2½	1941-43	99	16,551,402
1936-37—					
Works (a)	Commonwealth	3½	1951-52	97½	597,680
	States	3½			6,918,640
(c) (b)	States	3½	1937-47	100	53,200
Works (a)	Commonwealth	3½	1948-49	99½	524,670
	States	3½			7,346,000
Conversion (b)	Commonwealth	3½	1950-52	96½	12,360,958
Works, Redemptions, etc. (c)	States	(d)	(d)	(d)	1,946,510

(a) Raised in Australia. (b) Raised in London. (c) "Over the Counter Sales" and Conversion at State Treasuries. (d) Various. (e) Portion of loan of £266,000 for purchase of coastal vessel. Balance of loan to be received in instalments to 1st January, 1938.

Some detailed particulars of conversion loans in London are given in the preceding paragraph.

9. Public Debt for Commonwealth Purposes.—(i) *Total Debt*. Reference has already been made to the development of the Commonwealth Public Debt and the table appended shows the debt of the Commonwealth (excluding that of the States) at 30th June, 1936 :—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES AT 30th JUNE, 1936.

Particulars.	Maturing in London.	Maturing in New York.	Maturing in Australia.	Total. (a)
War Debt—	£ Stg.	£ (c)	£ Aust.	£
Stock, Bonds, etc.	11,020,160	..	186,361,597	197,381,757
Indebtedness to United Kingdom Government	79,724,221	..	..	79,724,221
Total	99,744,381	..	186,361,597	277,105,978
Works and other Purposes—				
Short dated Treasury Bills and Debentures	10,220,160	..	..	10,220,160
Other Treasury Bills (d) .. .. .	..	..	12,036,526	12,036,526
Stock, Bonds, etc.	54,789,430	16,351,176	19,848,343	90,988,949
Balance of Loans taken over from South Australia—				
Northern Territory	149,100	..	29,224	178,324
Port Augusta Railway	382,256	..	16,283	398,539
Properties transferred from New South Wales .. .. .	..	..	111,125	111,125
Total, Works and other Purposes	65,540,946	16,351,176	32,041,501	113,933,623
Total Commonwealth Purposes ..	156,285,327	16,351,176	218,403,098	391,039,601

PER HEAD OF POPULATION. (b)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.
War	13 7 11	..	27 10 1	40 18 0
Works and other Purposes	9 13 5	2 8 3	4 14 7	16 16 3
Total Commonwealth Purposes ..	23 1 4	2 8 3	32 4 8	57 14 3

(a) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (b) Based on population at 30th June, 1936.
(c) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £s. at the rate of 4.8665 to £1. (d) General Trust Fund investment.

Similar particulars at the 30th June, 1937, are as follows:—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES AT 30th JUNE, 1937.

Particulars.	Maturing in London.	Maturing in New York.	Maturing in Australia.	Total. (a)
War Debt—	£ Stg.	£ (c)	£ Aust.	£
Stock, Bonds, etc.	11,020,160	..	183,063,205	194,083,365
Indebtedness to United Kingdom Government	79,724,220	..	..	79,724,220
Total	90,744,380	..	183,063,205	273,807,585
Works and other Purposes—				
Short dated Treasury Bills and Debentures	9,720,160	..	..	9,720,160
Other Treasury Bills (d) .. .. .	..	..	10,968,806	10,968,806
Stock, Bonds, etc.	55,154,537	16,201,952	20,741,458	92,097,947
Balance of Loans taken over from South Australia—				
Northern Territory	149,100	..	29,224	178,324
Port Augusta Railway	19,450	..	15,944	26,394
Properties transferred from New South Wales .. .. .	..	..	111,125	111,125
Total, Works and other Purposes	65,034,247	16,201,952	31,866,557	113,102,756
Total Commonwealth Purposes ..	155,778,627	16,201,952	214,920,762	386,910,341

PER HEAD OF POPULATION. (b)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.
War	13 5 8	..	26 15 11	40 1 7
Works and other Purposes	9 10 5	2 7 5	4 13 4	16 11 2
Total Commonwealth Purposes ..	22 16 1	2 7 5	31 9 3	56 12 9

(a) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (b) Based on population at 30th June, 1937.
(c) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £s. at the rate of 4.8665 to £1. (d) General Trust Fund investment.

(ii) *Loans to States for Soldier Land Settlement.* In regard to the item "Advances to States for Soldier Land Settlement", the Commonwealth Government agreed to make remissions to the States in connexion with the losses sustained in respect of Soldier Land Settlement. In anticipation of the ratification of the proposals by all Governments concerned, the Commonwealth Government from 1st October, 1925, assumed responsibility for £5,000,000 of States' debts maturing in Australia, and an additional amount of £2,597,783 from 1st July, 1927. Further reference is made to this matter in Chapter IV.—Land Tenure and Settlement.

(iii) *Place of Flotation.* The loans taken over from South Australia, which constituted the first portion of the Federal Public Debt, included both London and Australian securities. The presence in the Treasury of a large holding of gold and the moderate rate of interest ruling on gilt-edged securities made the conditions in 1911 and for some little time afterwards very favourable for the local flotation of loans. London securities were redeemed as they fell due, and replaced by the $3\frac{1}{2}$ per cent. stock of the Loan Fund. Consequently, up to 1914 the amount of the securities repayable in London fell steadily, and the amount repayable in Australia rose rapidly. In 1915 the military loan from the Imperial Government caused a sharp rise in the amount of the securities repayable in London, which was maintained in the two following years. This was, however, more than offset by the local flotation of war loans. In 1925-26 a loan of £15,411,487, of which £10,402,754 was for Commonwealth purposes and £5,008,733 for the States, was raised in New York. The appended table gives particulars of Commonwealth loans outstanding in each of the last five years which had been floated overseas and in Australia respectively.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—PLACE OF FLOTATION.

Place of Flotation, etc.	At 30th June—				
	1933.	1934.	1935.	1936.	1937.
War Debt—					
London £ Stg.	90,744,381	90,744,380	90,744,381	90,744,381	90,744,380
Total Overseas (a) ..	90,744,381	90,744,380	90,744,381	90,744,381	90,744,380
Australia £ Aust.	192,389,981	189,403,799	187,716,301	186,361,597	183,063,205
Total War Debt (a) ..	283,134,362	280,148,179	278,460,682	277,105,978	273,807,585
Works and other purposes—					
London £ Stg.	67,897,843	66,788,760	66,488,759	65,540,946	65,034,247
New York £ (b)	16,889,983	16,711,476	16,526,641	16,351,176	16,201,952
Total Overseas (a) ..	84,787,826	83,500,236	83,015,400	81,892,122	81,236,199
Australia £ Aust.	28,884,315	29,402,361	32,674,988	32,041,501	31,866,557
Total Debt for Works, etc. (a)	113,672,141	112,902,597	115,690,388	113,933,623	113,102,756
Total Debt—					
London £ Stg.	158,642,224	157,533,140	157,233,140	156,285,327	155,778,627
New York £ (b)	16,889,983	16,711,476	16,526,641	16,351,176	16,201,952
Total Overseas (a) ..	175,532,207	174,244,616	173,759,781	172,636,503	171,980,579
Australia £ Aust.	221,274,296	218,806,160	220,391,289	218,403,098	214,929,762
Grand Total (a) ..	396,806,503	393,050,776	394,151,070	391,039,601	386,910,341

(a) The figures given represent the total "face" or "book" value of the public debt without any adjustment on account of currency changes since the loans were floated. (b) See note (c) to table on page 899.

The particulars given above for war debt maturing in Australia take into account the remissions by the Commonwealth on account of losses incurred by the States in connexion with Soldier Land Settlement, and differ on that account from the figures given in some earlier issues.

(iv) *Amount of Debt at Various Rates of Interest.*—The first debt taken over from South Australia consisted mainly of securities bearing interest varying from 3 per cent. to 4 per cent., the average rate of interest for the first year being £3 12s. 4d. For the first three years the increase in the debt was due almost entirely to the expansion of the 3½ per cent. stock of the Loan Fund, consequently the average rate of interest fell steadily, until on 30th June, 1914, it stood at £3 11s. 10d. With the loans raised for war and repatriation purposes interest rates rose until the National Debt Conversion Loan (July-August, 1931), reduced interest rates on internal loans by 22½ per cent. Conversion loans in London referred to on page 896 have reduced the average rate of interest on debt maturing in London by nearly one per cent. from £4 18s. 11d. per cent. in 1932 to £3 19s. 11d. in 1937. The average rate of interest on internal loans at 30th June, 1937, was £3 16s. 9d. per cent. as compared with £5 10s. 4d. per cent. at 30th June, 1931. The average rate of interest payable on the total debt decreased from £5 5s. 0d. per cent. in 1931 to £3 18s. 8d. per cent. at 30th June, 1937.

The accompanying table gives particulars of rates of interest on the debt for Commonwealth purposes for the year ended 30th June, 1936.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—RATES OF INTEREST.

				At 30th June, 1936—Debt Maturing in—			
Rates of Interest.				London.	New York.	Australia.	Total.
	%			£ (Stg.)	£ (c)	£ (Aust.)	£ (a)
5..	..	..	..	29,156,494	12,430,348	(b) 6,150	41,592,992
4.91667 (e)	..	..	..	79,724,221	..	..	79,724,221
4.75	..	..	..	6,000,000	..	..	6,000,000
4.65	..	..	..	..	..	535,170	535,170
4.5	..	..	..	..	3,920,828	..	3,920,828
4.45625	..	..	..	..	..	84,650	84,650
4.2625	..	..	..	..	..	1,015,226	1,015,226
4.25	..	..	..	..	..	91,757	91,757
4.06875	..	..	..	..	..	3,277,800	3,277,800
4 (f)	..	..	..	..	..	180,407,060	180,407,060
3.875	..	..	..	..	..	8,412,498	8,412,498
3.75	..	..	..	13,890,000	..	2,773,650	16,663,650
3.5	..	..	..	531,329	..	1,278,515	1,809,844
3.375	..	..	..	..	..	697,610	697,610
3.25	..	..	..	16,763,095	..	124,490	16,887,585
3..	..	..	..	27	..	7,603,061	7,603,088
2.90417	..	..	..	..	..	1,204	1,204
2.7125	..	..	..	..	..	2,008	2,008
2.5	..	..	..	9,220,161	..	..	9,220,161
2..	..	..	..	1,000,000	..	..	1,000,000
1.75	..	..	..	..	..	12,036,526	12,036,526
Overdue (d)	..	..	..	..	..	55,723	55,723
Total	..	..	..	156,285,327	16,351,176	218,403,098	391,039,601
Average rate	..	..	..	£ s. d. 4 0 5	£ s. d. 4 17 7	£ s. d. 3 16 7	£ s. d. 3 18 8

(a) See note (a) to table on page 899.

(b) War Savings Certificates.

(c) See note (c) to

table on page 899. (d) Includes War Savings Stamps, £14,444 and War Gratuity Bonds, £14,089.

(e) War Debt due to Government of the United Kingdom (see par. 5, page 896).

(f) Includes

unconverted securities, £17,310.

Similar details for the year ended 30th June, 1937, are as follows :—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—RATES OF INTEREST.

				At 30th June, 1937—Debt Maturing in—			
Rates of Interest.				London.	New York.	Australia.	Total.
%				£ (Stg.)	£ (c)	£ (Aust.)	£ (a)
5..	..	..	..	29,156,495	12,369,586	(b) 5,658	41,531,739
4.91667 (e)	..	..	..	79,724,220	..	..	79,724,220
4.75	..	..	..	6,000,000	..	..	6,000,000
4.65	..	..	..	..	..	339,120	339,120
4.5	..	..	..	..	3,532,366	..	3,532,366
4.45625	..	..	..	..	..	84,650	84,650
4.2625	..	..	..	..	..	961,921	961,921
4.25	..	..	..	..	..	90,105	90,105
4.06875	..	..	..	..	..	3,266,180	3,266,180
4 (f)	..	..	..	..	..	177,446,250	177,446,250
3.875	..	..	..	..	..	8,876,567	8,876,567
3.75	..	..	..	13,883,300	..	3,246,910	17,130,210
3.5	..	..	..	159,523	..	1,268,435	1,427,958
3.375	..	..	..	..	..	658,110	658,110
3.25	..	..	..	16,763,096	..	93,290	16,856,386
3..	..	..	..	27	..	7,566,062	7,566,089
2.90625	..	..	..	..	..	1,204	1,204
2.75	..	..	..	371,806	..	..	371,806
2.7125	..	..	..	..	..	2,008	2,008
2.25	..	..	..	8,720,160	..	..	8,720,160
2..	..	..	..	1,000,000	..	..	1,000,000
1.75	..	..	..	..	..	10,968,805	10,968,805
Overdue (d)	..	..	..	..	..	54,487	54,487
Total	..	..	..	155,778,627	16,201,952	214,929,762	386,910,341
Average rate %				£ s. d. 3 19 11	£ s. d. 4 17 8	£ s. d. 3 16 9	£ s. d. 3 18 8

(a) See note (a) to table on page 899.

(b) War Savings Certificates.

(c) See note (c) to table on page 899.

(d) Includes War Savings Stamps, £14,300 and War Gratuity Bonds, £13,888.

(e) War Debt due to Government of the United Kingdom (see par. 5, page 896).

(f) Includes unconverted securities, £13,670.

(v) *Amount of Interest Payable.* The next table shows the interest payable in Australia and overseas on the Commonwealth Public Debt (excluding amounts raised on behalf of the several States and debts of the States taken over) at 30th June in the years 1933 to 1937 inclusive.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—INTEREST PAYABLE.

At 30th June—

Interest on and where payable.				1933.	1934.	1935.	1936.	1937.	
<hr/>									
War Debt—									
London	£ Stg.	c	651,008	c	426,008	c	426,008	c	426,008
Australia	£ Aust.		7,694,479		7,571,996		7,501,517		7,443,363
									7,310,664
Total War Debt				£ (a)	8,345,487	7,998,004	7,927,525	7,869,371	7,736,672
Average Rate				%	£4 2s. 1d.	£3 19s. 10d.	£3 19s. 9d.	£3 19s. 9d.	£3 19s. 9d.
<hr/>									
Works and other Purposes—									
London	£ Stg.		3,154,851		3,000,772		2,682,387		2,651,593
New York	£ (b)		823,249		814,646		805,973		797,954
									790,935
Total Overseas				£ (a)	3,978,100	3,815,418	3,488,360	3,449,547	3,405,189
Australia				£ Aust.	902,778	890,334	935,504	923,581	939,461
Total Debt for Works, etc...				£ (a)	4,880,878	4,705,752	4,423,864	4,373,128	4,344,650
Average Rate				%	£4 5s. 11d.	£4 3s. 4d.	£3 16s. 6d.	£3 16s. 9d.	£3 16s. 10d.
<hr/>									
Total Debt—									
London	£ Stg.	c	3,805,859	c	3,426,780	c	3,108,395	c	3,077,601
New York	£ (b)		823,249		814,646		805,973		797,954
									790,935
Total Overseas				£ (a)	4,629,108	4,241,426	3,914,368	3,875,555	3,831,197
Australia				£ Aust.	8,597,257	8,462,330	8,437,021	8,366,944	8,250,125
Grand Total				£ (a)	13,226,365	12,703,756	12,351,389	12,242,499	12,081,322
Average Rate				%	£4 3s. 5d.	£4 1s. 1d.	£3 18s. 7d.	£3 18s. 8d.	£3 18s. 8d.

(a) The totals shown represent the nominal amount of interest, taking no account of exchange.

(b) See note (c) to table on p. 899.

(c) Excludes suspended interest on War Debt owing to British Government.

(vi) *Dates of Maturity.* The dates of maturity of the several portions of the Commonwealth debt are shown hereunder according to years ending 30th June. On that account the figures given are not directly comparable with those published prior to 1929-30 which were given for calendar years. The Commonwealth Government has refrained from issuing interminable stock, but, in respect of a small proportion of the debt, no definite date of maturity had been assigned on 30th June, 1936.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—DUE DATES OF AMOUNTS
OUTSTANDING ON 30th JUNE, 1936(a).

Due Dates (year ended 30th June).				Due in—			Total.
				London.	New York.	Australia.	
				£ (Stg.)	£ (d)	£ (Aust.)	£ (c)
1937	..	..	..	10,591,967	..	12,336,669	22,928,636
1938	..	..	..	..	..	146,772	146,772
1939	..	..	..	159,523	..	38,909,068	39,068,591
1940	..	..	..	..	..	447,438	447,438
1941	..	..	..	..	..	902,270	902,270
1942	..	..	..	..	..	30,593,860	30,593,860
1943	..	..	..	..	..	4,150,340	4,150,340
1944	..	..	..	..	..	1,167,390	1,167,390
1945	..	..	..	..	..	24,901,568	24,901,568
1948	..	..	..	..	..	21,929,427	21,929,427
1949	..	..	..	..	..	4,345,430	4,345,430
1950	..	..	..	..	..	579,740	579,740
1951	..	..	..	..	..	13,752,891	13,752,891
1952	..	..	..	..	..	481,990	481,990
1954	..	..	..	13,890,000	..	13,116,470	27,006,470
1956	..	..	..	..	13,959,531	12,995,318	26,954,849
1958	..	..	..	..	2,391,645	12,495,876	14,887,521
1960	..	..	..	..	..	12,489,032	12,489,032
1961	..	..	..	22,406,317	..	..	22,406,317
1962	..	..	..	..	..	12,045,235	12,045,235
1975	..	..	..	356,778	..	..	356,778
1976	..	..	..	29,156,494	..	..	29,156,494
Unconverted	..	..	..	..	..	17,310	17,310
Overdue	..	..	..	..	..	41,279	41,279
Half-yearly	..	..	..	..	..	232,573	232,573
Indefinite	..	..	..	..	..	214,027	214,054
Annual repayments	..	..	..	79,724,221	..	..	79,724,221
Transferred Properties (b)	..	..	..	..	..	111,125	111,125
Total	..	..	..	156,285,327	16,351,176	218,403,098	391,039,601

(a) Loans of which the Government has the option of redemption during a specified period have been, in each case, classified according to the latest date of maturity. (b) From New South Wales. See 14 par. 4, hereinbefore. (c) See note (a) to table on page 899. (d) See note (c) on table on page 899

Similar particulars as at the 30th June, 1937, are as follows:—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—DUE DATES OF AMOUNTS OUTSTANDING ON 30th JUNE, 1937(a).

Due Dates (year ended 30th June).				Due in—			Total.
				London.	New York.	Australia.	
				£ (Stg.)	£ (d)	£ (Aust.)	£ (c)
1938	..	..	..	9,720,160	..	11,116,391	20,836,551
1939	..	..	..	159,523	..	37,622,088	37,781,611
1940	..	..	..	..	..	447,438	447,438
1941	..	..	..	..	..	902,270	902,270
1942	..	..	..	..	..	30,587,760	30,587,760
1943	..	..	..	371,806	..	4,282,030	4,653,836
1944	..	..	..	..	..	1,157,310	1,157,310
1945	..	..	..	..	..	24,449,478	24,449,478
1948	..	..	..	..	..	21,705,037	21,705,037
1949	..	..	..	..	..	4,802,270	4,802,270
1950	..	..	..	..	..	511,970	511,970
1951	..	..	..	..	..	13,651,521	13,651,521
1952	..	..	..	..	..	1,001,830	1,001,830
1954	..	..	..	13,883,300	..	12,954,730	26,838,030
1956	..	..	..	..	13,841,541	12,781,688	26,623,229
1958	..	..	..	..	2,360,411	12,320,486	14,680,897
1960	..	..	..	..	..	12,284,462	12,284,462
1961	..	..	..	22,406,317	..	..	22,406,317
1962	..	..	..	..	..	11,746,375	11,746,375
1975	..	..	..	356,779	..	..	356,779
1976	..	..	..	29,156,495	..	..	29,156,495
Unconverted	..	..	..	..	..	13,670	13,670
Overdue	..	..	..	..	..	40,097	40,097
Half-yearly	..	..	..	..	..	228,936	228,936
Indefinite	..	..	..	27	..	210,800	210,827
Annual repayments	..	..	..	70,724,220	..	..	70,724,220
Transferred Properties (b)	..	..	..	..	..	111,125	111,125
Total	..	..	..	155,778,627	16,201,952	214,929,762	386,910,341

(a) Loans of which the Government has the option of redemption during a specified period have been, in each case, classified according to the latest date of maturity. (b) From New South Wales. See § 4 par. 4 hereinbefore. (c) See note (a) to table on page 899. (d) See note (c) to table on page 899.

10. Sinking Funds.—Particulars relating to the creation of sinking funds are included in previous issues.

The old sinking funds were merged in the National Debt Sinking Fund on 11th August, 1923. Particulars of receipts and expenditure of the Commonwealth Account from the year 1932-33 are as follows :—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES.—SINKING FUND.

Items.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	Total.
	£	£	£	£	£	£
Cr. Brought forward ..	2,050,172	1,959,870	881,700	1,571,603	1,780,186	..
Balance transferred to Fund on 11th August, 1923 ..	..	..	..	..	..	2,262,982
From Consolidated Revenue	2,684,654	2,927,671	3,031,774	3,244,970	3,434,210	35,488,527
Repayments of Sundry Loans ..	41,426	27,944	13,194	13,954	14,758	1,255,416
Purchase Money and Repayments under War Service Homes Act ..	550,802	419,320	458,211	515,896	550,158	8,683,214
Half Net Profit Commonwealth Bank ..	337,702	335,077	382,722	373,770	354,090	4,258,477
Reparation Moneys ..	524	649	755	623	154	5,573,809
Interest on Investments ..	58,271	27,836	23,781	29,202	38,797	722,479
Other Contributions ..	11,178	13,457	13,452	13,453	13,453	141,081
Total ..	5,734,729	5,711,824	4,805,589	5,763,471	6,185,815	58,385,985
Dr. Redemptions ..	3,774,859	4,830,124	3,233,986	3,983,285	4,248,520	20,444,000
Carried forward ..	1,959,870	881,700	1,571,603	1,780,186	1,937,495	1,937,495
Total ..	5,734,729	5,711,824	4,805,589	5,763,471	6,185,815	58,385,985

The Imperial Government loan comes in a different category from the others, since it is being liquidated by the funding arrangement described on page 896.

Information regarding the transactions of the States' Account of the National Debt Sinking Fund is published in the Finance Bulletins issued by this Bureau.

§ 5. Cost of War and Repatriation.

In view of the importance of the subject, a further reference is here made to the cost of the war. The general policy of the Commonwealth Government has been to pay from Consolidated Revenue all charges for interest, sinking fund, pensions and other recurring charges consequent upon the war, and part of the expense of repatriation. On the other hand, the whole direct cost of the war and the larger proportion of the cost

of repatriation have been paid from loans. The total cost from both sources to the 30th June, 1937, is set out in the following table:—

COST OF WAR SERVICES.

From Consolidated Revenue.

Year.	War and Repatriation Services, including War Pensions.	Interest and Sinking Fund.	Total.	From War Loan. (b)
	£	£	£	£
1914-15	896,190	115,145	1,011,335	14,100,000
1915-16	1,718,887	2,059,491	3,778,378	37,423,568
1916-17	2,439,271	5,988,058	8,427,329	53,114,237
1917-18	4,049,955	7,813,296	11,863,251	55,028,180
1918-19	6,536,927	14,718,174	21,255,101	59,547,080
1919-20	8,976,793	15,774,938	24,751,731	43,294,764
1920-21	13,672,345	19,613,888	33,286,233	24,148,501
1921-22	10,261,471	21,075,693	31,337,164	7,576,977
1922-23	9,298,560	20,801,912	30,100,472	1,762,694
1923-24	8,161,230	20,555,063	28,716,293	691,247
1924-25	8,232,656	20,155,426	28,388,082	Cr. 32,051
1925-26	8,473,717	20,539,123	29,012,840	Cr. 7,613
1926-27	8,814,001	20,300,101	29,114,102	23,938
1927-28	8,788,037	20,005,972	28,794,009	Cr. 23,741
1928-29	9,026,749	20,771,652	29,798,401	Cr. 12,972
1929-30	9,520,750	20,213,586	29,734,336	Cr. 2,669
1930-31	10,468,748	18,672,080	29,140,828	Cr. 2,206
1931-32	8,764,848	12,198,565	20,963,413	..
1932-33	7,928,817	11,193,150	19,121,967	..
1933-34	8,187,952	10,966,411	19,154,363	..
1934-35	8,433,372	10,584,489	19,017,861	..
1935-36	8,660,427	9,580,972	18,241,399	..
1936-37	9,101,353	9,622,600	18,723,953	..
Discounts and Flotation Expenses on Loans .. .. .	..	..	..	5,999,094
Indebtedness to the Government of the United Kingdom for payments made, services rendered, and goods supplied during the war (a) .. .. .	..	..	..	43,398,098
War Gratuities paid in cash	452,295	..	452,295	27,058,640
Total to 30th June, 1937	180,865,351	333,319,785	514,185,136	373,085,766

(a) The total indebtedness to the Government of the United Kingdom involved in the Funding Arrangements Act 1921 was £92,380,157. At 30th June, 1937, the amount outstanding had been reduced to £79,744,220. (b) Excluding expenditure on War Service Homes from 1923-24. (See page 895.)

§ 6. Old-age and Invalid Pensions.

1. General.—In previous issues of the Year Book an account was given of the introduction of the old-age pension system in Australia, together with a detailed description of the Commonwealth Invalid and Old-age Pensions Act 1908, which became operative on 1st July 1909, while invalid pensions were first paid from 15th December,

1910. (See Official Year Books, Nos. 3 to 8.) The following statement shows the rates of pension under the original Act and the rates as they have been varied from time to time :—

RATES OF PENSION PAYABLE.

Date from which Operative.	Pension Payable (Annual Rate.)	Pensioner's Annual Income including pension not to exceed—
	£ s. d.	£ s. d.
1st July, 1909	26 0 0	52 0 0
12th October, 1916	32 10 0	58 10 0
1st January, 1920	39 0 0	65 0 0
13th September, 1923	45 10 0	78 0 0
8th October, 1925	52 0 0	84 10 0
23rd July, 1931	45 10 0	78 0 0
13th October, 1932	45 10 0 (a)	71 10 0
26th October, 1933	45 10 0	78 0 0
4th July, 1935	46 16 0	79 6 0
24th September, 1936	49 8 0	81 18 0

(a) Maximum amount of pension payable.

In 1916 an old-age pension of 2s. per week was first paid to pensioners who became inmates of Benevolent Asylums. This amount was increased to 3s. per week in 1923 and extended to pensioners entering hospitals. Further increments in these cases were granted in 1925 and 1928 raising the pension to 4s. and 5s. 6d. per week respectively. The amount was reduced to 5s. per week in 1931 and to 3s. 9d. per week in 1932, but was restored to 5s. per week in 1933 and to 5s. 6d. per week in 1936.

Asiatics, generally, are not eligible to receive an invalid or old-age pension, unless born in Australia, but, by an amending Act which came into operation from 7th October, 1926, pension rights were extended to Indians who were born in British India.

Invalid pensions were granted from 15th December, 1910. An applicant for an invalid pension must satisfy the Department that his or her disability is both total and permanent and became so in Australia. In 1920 special provision was made for a permanently blind person, by which the annual pension may be at such a rate (not exceeding that shown in the table above) as will make his income plus that of his wife together with the pension equal to an amount not exceeding £221 per annum, or such other amount as is declared to be the basic wage of the State in which the pensioner resides. The maximum pension now payable to a blind person is £49 8s. per annum and the limit of income is £224 18s. per annum.

The Financial Emergency Act 1932, which operated from 13th October, 1932, materially amended the conditions under which pensions were granted. The maximum rate of pension payable, viz., £45 10s. per annum, was not altered, but this rate was made to apply only to pensioners without other means. Where pensioners were in receipt of other income or were possessed of property (other than their own homes) valued at £60 or over the rates of pension were graduated. Payments to pensioner inmates of Benevolent Asylums and Hospitals and to these institutions for pensioners' maintenance were reduced to 3s. 9d. and 11s. 3d. per week respectively. The Financial Relief Act 1933 restored from 26th October, 1933, the reductions imposed by the Financial Emergency Act 1932 and the rates and permissible income were placed on the level of those operating from July, 1931. Provision was also made for an annual review of the rate of pension, based on the cost of living index-number; the maximum rate of pension was fixed at £52 per annum and the minimum rate, £45 10s. The rate of payment to Benevolent Asylums and Hospitals for the maintenance of pensioner inmates was increased to 13s. per week from July, 1935.

In September, 1936, an amended scale of cost of living index-numbers was adopted providing for a maximum pension of not more than £52 per annum and not less than £46 16s. per annum. The rate of pension to pensioner inmates of Benevolent Asylums and Hospitals was increased to 5s. 6d. per week and the rate of payment for maintenance to 13s. 6d. per week.

Further explanation of pension rates and other matters incorporated in the act above referred to are given in the Invalid and Old-age Pensions Handbook issued by the Commissioner of Pensions.

2. *Old-age Pensions.*—(i) *Number in force.* At 30th June, 1935, there were 197,126 old-age pensions in force. During 1935-36, 26,031 pensions claims were granted, while 17,000 pensions fell in through cancellations and deaths. The net increase for the year was 9,622, and the total in existence at 30th June, 1936, 206,748.

In 1936-37, 26,537 claims were granted while 17,595 pensions fell in through cancellations and deaths, thus giving a net increase of 8,942.

(ii) *Sexes of Pensioners.* Of the pensioners at 30th June, 1936, 88,118 (or 42 per cent.) were males, and 118,630 (or 58 per cent.) were females. At 30th June, 1937, the relative proportions remained practically the same as in 1935-36. Details for the several States are as follows:—

OLD-AGE PENSIONS.—SEXES OF PENSIONERS, 1935-36.

State.		Males.	Females.	Total.	Masculinity. (a)
New South Wales	.. ..	34,345	43,907	78,252	78.22
Victoria	.. ..	23,799	36,749	60,548	64.76
Queensland	.. ..	11,645	13,848	25,493	84.09
South Australia	.. ..	7,970	11,944	19,914	66.73
Western Australia	.. ..	6,521	7,219	13,740	90.33
Tasmania	.. ..	3,838	4,963	8,801	77.33
Total..	.. ..	88,118	118,630	206,748	74.28

(a) Number of males to each 100 females.

Similar particulars as at 30th June, 1937, are as follows:—

OLD-AGE PENSIONS.—SEXES OF PENSIONERS, 1936-37.

State.		Males.	Females.	Total.	Masculinity. (a)
New South Wales	.. ..	35,806	45,965	81,771	77.90
Victoria	.. ..	24,575	38,180	62,755	64.37
Queensland	.. ..	12,161	14,694	26,855	82.76
South Australia	.. ..	8,245	12,558	20,803	65.66
Western Australia	.. ..	6,731	7,722	14,453	87.17
Tasmania	.. ..	3,960	5,093	9,053	77.75
Total	.. ..	91,478	124,212	215,690	73.65

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Condition of Pensioners.* The recorded ages of the 20,631 persons, 12,838 males and 13,793 females, to whom pensions were granted during the year 1935-36 varied considerably, ranging from 4,016 at age 60 to 2 at age 96. The conjugal condition of these new pensioners was as follows:—Males—single, 2,037; married, 7,842; and widowed, 2,359. Females—single, 1,757; married, 6,082; and widowed, 5,054.

In 1936-37, the recorded ages of persons to whom pensions were granted varied from 5,075 at age 60 to 1 at age 97. The conjugal condition of these new pensioners were:—Males, single, 2,553; married, 7,804; and widowed, 2,235. Females—single, 1,744; married, 7,132; and widowed, 5,069.

3. *Invalid Pensions.*—(i) *Number in force, 1936.* The number of invalid pensioners increased from 76,852 in 1934-35 to 80,487 in 1935-36 and to 83,396 in 1936-37, increases of 3,035 and 2,909 respectively. In 1935-36, 11,187 claims were allowed and 7,552 pensions became inoperative through cancellations or deaths. In 1936-37, 10,644 claims were allowed and 7,735 became inoperative.

(ii) *Sexes of Pensioners.* Of the 80,487 persons in receipt of invalid pensions on 30th June, 1936, 34,987, or 43 per cent. were males, and 45,500, or 57 per cent. were females. In 1936-37 the relative proportions had not changed. Details for the several States are as follows:—

INVALID PENSIONS.—SEXES OF PENSIONERS, 1935-36.

State.	Males.	Females.	Total.	Masculinity. (a)
New South Wales	16,074	21,523	37,597	74.68
Victoria	7,593	10,238	17,741	73.29
Queensland	5,411	5,966	11,377	90.70
South Australia	2,486	3,734	6,220	66.58
Western Australia	2,094	2,388	4,482	87.69
Tasmania	1,419	1,651	3,070	85.95
Total	34,987	45,500	80,487	76.89

(a) Number of males to each 100 females.

Similar particulars as at 30th June, 1937, are as follows:—

INVALID PENSIONS.—SEXES OF PENSIONERS, 1936-37.

State.	Males.	Females.	Total.	Masculinity. (a)
New South Wales	16,637	22,533	39,170	73.83
Victoria	7,790	10,492	18,282	74.25
Queensland	5,448	6,162	11,610	88.41
South Australia	2,592	3,913	6,505	66.24
Western Australia	2,124	2,510	4,634	84.62
Tasmania	1,490	1,705	3,195	87.39
Total	36,081	47,315	83,396	76.26

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Conditions of Pensioners, 1935-36.* The recorded ages of the 11,187 persons (5,420 males and 5,767 females) to whom invalid pensions were granted during 1935-36 varied from 16 to 84.

The conjugal condition of persons to whom invalid pensions were granted during the year was as follows:—Males—single, 2,227; married, 2,905; and widowed, 288. Females—single, 2,164; married, 2,262; and widowed, 1,341.

In 1936-37, the conjugal condition of new pensioners was:—Males—single, 2,143; married, 2,758; and widowed, 307; total 5,208. Females—single, 2,089; married, 2,002; and widowed, 1,255; total, 5,436. The age varied from 16 to 86.

4. *Cost of Administration.*—Under State control the cost of administration differed considerably in the several States, and for 1908-9 represented in New South Wales 4.17 per cent. of the amount actually paid in pensions. In Victoria for the same year the corresponding percentage was 0.70. The total cost to the Commonwealth of administering the Old-age and Invalid Pensions Department in 1935-36 was approximately £115,257, or about 0.60 per cent. of the amount paid to pensioners and to Benevolent Asylums and Hospitals. The corresponding cost in 1936-37 was approximately £118,851 or about 0.85 per cent. of the total payments.

The actual sum disbursed in old-age and invalid pensions in the financial year 1935-36, apart from the cost of administration and inclusive of the amount paid to asylums and hospitals for the maintenance of pensioners, was £12,797,726 (about 38s. per head) and in 1936-37, £13,998,793 (41s. per head).

5. **Summary.**—The following table gives details concerning the working of the Act for the last six years:—

OLD-AGE AND INVALID PENSIONS.—SUMMARY, AUSTRALIA.

PENSIONERS' SUMMARY, AUSTRALIA.										
Year ended 30th June—	Number of Pensioners.				Amount Paid in Pensions.	Total Payment to Pensioners and to Asylums and Hospitals for Maintenance of Pensioners.	Cost of Administration.	Cost of Administration per £100 paid to Pensioners and to Asylums and Hospitals.	Average Fortnightly Pension on last day of Financial Year.	
	Old-age.		Invalid.	Total.						
	No.	Est. No. per 1,000 of persons eligible on age qualification.								
										(a)
No.		No.	No.	£	£	£	s. d.	s. d.		
1932	183,317	348	72,292	255,609	10,978,633	11,125,956	81,859	14 9	b33 3	
1933	176,425	325	72,742	249,167	10,643,196	10,771,061	92,305	17 2	31 10	
1934	183,397	329	77,282	260,679	10,836,263	10,963,096	105,308	19 3	33 8	
1935	197,126	344	76,852	273,978	11,624,769	11,762,036	110,726	18 3	33 7	
1936	206,748	352	80,487	287,235	12,634,706	12,797,726	115,257	c 18 0	d34 8	
1937	215,600	359	83,396	299,086	13,827,636	13,998,793	118,851	c 17 0	e36 8	

(a) Based on an estimate of the number of old-age pensioners per 1,000 of the aggregate of males aged 65 and over and females aged 60 and over as disclosed at the Censuses of 1921 and 1933.
 (b) A general reduction of 2s. per fortnight was made in July, 1931, as provided by the Financial Emergency Act 1931.
 (c) A general increase of 2s. per fortnight occurred in September, 1936.

Separate particulars of the payments to Invalid and to Old-age pensioners are not available but the annual liability at 30th June, 1937, together with the total payments in 1936-37 are given hereunder:—

INVALID AND OLD-AGE PENSIONS—PAYMENTS AND ANNUAL LIABILITY.

State.	Payments Old-age and Invalid Pensions, 1936-37. (a)	Annual Liability at 30th June, 1937.		
		Old-age Pensions.	Invalid Pensions.	Total.
	£.	£	£	£
New South Wales	5,684,963	3,895,086	1,875,588	5,770,674
Victoria	3,799,851	2,984,150	880,932	3,865,082
Queensland	1,789,314	1,269,580	558,584	1,828,164
South Australia	1,260,812	973,180	312,494	1,285,674
Western Australia	890,040	685,828	223,054	908,882
Tasmania	573,813	428,818	153,686	582,504
Total	13,998,793	10,236,642	4,004,338	14,240,980

(a) Including amounts paid to Benevolent Asylums and Hospitals for the maintenance of pensioners.

§ 7. Maternity Allowance.

1. **General.**—During the session of 1912 the Federal Parliament passed an Act providing for the payment of maternity allowances. The scope and main provisions of the Act are given in Year Book No. 14, p. 1047. The most important conditions in the original Act were that the sum of five pounds was payable in the case of each confinement resulting in the birth of a viable child whether such child was born alive or dead. The mother must be a native of Australia or intend to settle permanently therein. No payment is made in the case of an aboriginal or an Asiatic. The Financial Emergency

Act 1931 reduced the allowance payable to £4 and limited the application of the original Act to those cases where the combined income of husband and wife did not exceed £260 (reduced to £208 by the Financial Emergency Act 1932) in the previous 12 months.

From 1st August, 1934, the limit of income was increased by £13 per annum in respect of each previous child of the claimant under the age of 14 years living at the date of the birth, with a maximum income limit of £209. The amount of the allowance was also increased from £4 by 5s. in respect of each such child up to a maximum of £5.

On the 21st September, 1936, the limit of income was increased from £208 to £221 with an allowance of £13 per annum in respect of each previous surviving child under 14 years of age up to a maximum income of £312. The amount of maternity allowance was also increased to £4 10s. in cases where there was no previous surviving issue under 14 years of age and £5 where there was any such issue.

The following table gives a summary in connexion with the working of the Maternity Allowance Act for the years 1933 to 1937 :—

MATERNITY ALLOWANCE.—SUMMARY.

Year.	Claims Paid.	Claims Rejected.	Amount Paid.	Cost of Administration.	Cost per £100 of allowance paid.
	No.	No.	£	£	£ s. d.
1932-33 ..	80,311	6,631	320,986	12,420	3 17 5
1933-34 ..	75,781	7,289	302,928	11,799	3 17 11
1934-35 ..	76,442	5,866	329,321	(a) 12,000	(a) 3 12 11
1935-36 ..	76,953	5,459	335,552	(a) 12,200	(a) 3 12 9
1936-37 ..	79,254	5,843	370,150	(a) 12,150	(a) 3 5 8
Aggregate— 1912-13 to 1936-37 ..	2,956,626	48,625	14,414,239	340,075	(a) 2 7 2

(a) Approximate.

2. Claims paid in each State.—The following table shows the number of maternity allowance claims paid in each State during the last five years :—

MATERNITY ALLOWANCE.—CLAIMS PAID IN EACH STATE.

Year ended 30th June.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Total.
1933 ..	31,699	20,100	11,680	7,048	5,879	3,880	25	80,311
1934 ..	29,960	19,499	10,780	6,783	4,951	3,788	20	75,781
1935 ..	30,354	19,940	10,940	6,409	5,935	3,725	39	76,442
1936 ..	30,463	19,672	11,640	6,613	4,850	3,689	26	76,953
1937 ..	31,086	20,350	12,170	6,854	4,731	4,018	25	79,254
Total, 1910 to 1936-37 ..	1,177,946	773,305	435,312	257,102	187,592	124,412	957	2,956,626

§ 8. Commonwealth Public Service Superannuation Fund.

This Fund, which was inaugurated on the 20th November, 1922, is maintained by contributions of officers of Parliament, of employees of the Commonwealth Public Service and the Defence Department, and by payments from the Consolidated Revenue, the latter being made when the officers retire on pension. Full particulars as to the benefits, etc., will be found in Official Year Book No. 18, page 383.

The number of contributors to the fund at 30th June, 1936, was 31,838, viz., 28,272 males and 3,566 females, and the average pension contributed for was 4.528 units or £117 14s. 7d. per annum.

During 1935-36 the receipts of the fund amounted to £631,334 of which officers' contributions represented £401,594 and interest on investments, £228,366. The payments from the fund for the year were £733,142, of which £589,697 was invested, bringing the total funds invested to £5,649,558 (at cost). The average rate of interest on investments at 30th June, 1936, was £4 6s. 6d. per cent.

Pensions in force on the 30th June, 1936, numbered 5,677, excluding commuted pensions, with a net annual liability of £500,067, of which £389,424 represented the share payable from the Consolidated Revenue Fund.

Contributions from the Commonwealth Consolidated Revenue to the fund were reduced by 20 per cent. from July, 1931 under the Financial Emergency Act 1931, and as the Government contribution in respect of any officer does not commence until he is superannuated, the reduced contribution affected all pensioners. The investments of the fund were subject to the interest reduction of approximately 22½ per cent. as provided in the above mentioned Act. The Financial Relief Act 1933 provided for the restoration of full pensions from the 21st October, 1933.

§ 9. Currency and Coinage.

1. **Australian Mints.**—Soon after the discovery of gold in Australia a branch of the Royal Mint was established in Sydney. The formal opening took place on the 14th May, 1855. The Melbourne branch was opened on the 12th June, 1872, and the Perth branch on the 20th June, 1899. The States of New South Wales, Victoria and Western Australia provided an annual endowment in return for which the mint receipts were paid into the respective State Treasuries, and it might be said until recently that, apart from expenditure on buildings, new machinery, etc., the amounts paid into the Treasuries fairly balanced the mint subsidies. Early in 1923, however, it was announced that owing to losses incurred in the operations of recent years, the British Treasury in consultation with the New South Wales Government had decided to close the Sydney branch at the end of 1923. This decision was, however, not carried out until the end of 1926.

2. **Standard Weight and Fineness of Coinage.**—In addition to coins minted at Melbourne and Perth mints, Imperial silver coins legally current in England and which were minted prior to 31st March, 1920, when the fineness was reduced from .925 to .500 are also legal tender in Australia where the fineness of silver coin is .925. The circulation of Imperial silver currency in Australia has practically ceased, as the ruling exchange rate has made it profitable to transfer to London all coins legally current there. Sovereigns coined at the Royal Mint, London, or at any of its branches throughout the Empire are legal tender in Australia. The provisions as to legal tender are—gold coins, legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze up to one shilling. The standard weights of the sovereign and half-sovereign are respectively 123.27447 grains and 61.63723 grains, but these coins will pass current if they do not fall below 122.5 grains and 61.125 grains respectively. Gold coins have ceased to circulate in Australia and Commonwealth Bank Notes are legal tender to any amount.

3. **Gold Receipts and Issues.**—(i) *Receipts.* The receipts of gold during 1936 and the aggregate at each mint to the end of 1936 were as follows:—

AUSTRALIAN MINTS.—RECEIPTS OF GOLD, 1936, AND TOTAL.

Mint.	Deposits during 1936.	Total to end of 1936.		
		Quantity.		Value.
		Gross.	Fine.	
	ozs.	ozs.	ozs.	£
Sydney ..	..	(a) 42,082,928	(a) 36,907,045	(a) 156,771,141
Melbourne ..	360,930	43,621,171	36,615,003	168,266,725
Perth ..	1,010,344	38,054,261	31,080,237	132,020,360
Total ..	1,380,274	123,758,360	107,605,345	457,078,235

(a) To end of 1926.

In cases of deposits containing over a certain minimum of silver, the excess is paid for at the rate fixed from time to time by the Deputy-Master of the branch mint concerned.

(ii) *Issues.* The Australian mints, besides issuing gold coin in the shape of sovereigns and half-sovereigns, also issue gold bullion, partly for the use of local manufacturers (jewellers and dentists), and partly for export. Since September, 1931, when the United Kingdom departed from the gold standard, the minting of gold coins by Australian mints has ceased. Australian exports of gold are mainly in the form of 400-oz. ingots, but in earlier years a considerable amount of gold was shipped in 10-oz. bars to India. During recent years the export was subject to regulation by the Commonwealth Government. The issues during 1936, and the total to the end of that year, are shown in the table below:—

AUSTRALIAN MINTS.—ISSUES OF GOLD.

Mint.	Coin.			Bullion.	Total.
	Sovereigns.	Half-sovereigns.	Total.		
1936—	£	£	£	£	£
Melbourne ..	..	..	..	1,007,110	1,007,110
Perth ..	..	..	..	3,366,727	3,366,727
Total, 1936	..	..	..	4,373,837	4,373,837
Aggregate—					
Sydney ..	144,435,550	4,781,000	149,216,550	7,574,408	156,790,958
Melbourne ..	147,283,131	946,780	148,229,911	20,049,754	168,279,665
Perth ..	106,384,197	367,338	106,751,535	25,271,510	132,023,045
Total to end of 1936 ..	398,102,878	6,095,118	404,197,996	52,895,672	457,093,668

(iii) *Withdrawals of Worn Coin.* The mints receive light and worn coin for recoinage. The total withdrawals of worn gold coin to the end of 1936 were as follows:—Sydney (to 1926), £1,110,807; Melbourne, £882,304 (since and including 1890); and Perth, £1,401.

4. *Price of Gold.*—In consequence of Great Britain's departure from the gold standard on 21st September, 1931, the market value of gold immediately rose by about 17½ per cent. from £4 4s. 11d. to £1 19s. 7d. per ounce fine. Considerable fluctuations have since taken place and the average value of gold based on the London open market price per ounce fine adjusted to the telegraphic transfer exchange rate (Australia on London) less a small percentage for shipping charges is given in the following table in £ Sterling and £ Australian for each year from 1930 to 1936 and for each month from January, 1934 to September, 1937. Particulars are also shown for the value of the sovereign.

PRICE OF GOLD.—LONDON AND AUSTRALIA, 1930 to 1937.

Month.	Average for	London.		Australia.		Equivalent to a premium of—
		Average price per ounce, fine.	Average value of Sovereign.	Average price per ounce, fine.	Average value of Sovereign.	
	Year—	£s s. d.	£s s. d.	£A s. d.	£A s. d.	%
	1930 ..	4 4 11	1 0 0	4 8 9	1 0 11	4.4
	1931 ..	4 12 5	1 1 9	5 17 6	1 7 8	38.3
	1932 ..	5 18 0	1 7 9	7 5 8	1 14 4	71.5
	1933 ..	6 4 11	1 9 5	7 14 2	1 16 3	81.4
	1934 ..	6 17 8	1 12 5	8 9 11	2 0 0	100.0
	1935 ..	7 2 1	1 13 5	8 15 5	2 1 4	106.5
	1936 ..	7 0 3	1 13 0	8 13 2	2 0 9	103.8
	Average for Month—					
1934—						
	January ..	6 10 1	1 10 8	8 0 7	1 17 10	89.1
	February ..	6 16 11	1 12 3	8 9 1	1 19 10	99.0
	March ..	6 16 6	1 12 2	8 8 5	1 19 8	98.3
	April ..	6 15 2	1 11 10	8 6 10	1 19 3	96.3
	May ..	6 16 3	1 12 1	8 8 3	1 19 7	98.0
	June ..	6 17 9	1 12 5	8 10 0	2 0 0	100.1
	July ..	6 17 10	1 12 6	8 10 2	2 0 1	100.4
	August ..	6 18 7	1 12 8	8 11 1	2 0 3	101.4
	September ..	7 0 10	1 13 2	8 13 10	2 0 11	104.6
	October ..	7 1 7	1 13 4	8 14 10	2 1 2	105.8
	November ..	6 19 5	1 12 10	8 12 2	2 0 6	102.6
	December ..	7 0 7	1 13 1	8 13 7	2 0 10	104.3
1935—						
	January ..	7 1 10	1 13 5	8 15 1	2 1 3	106.1
	February ..	7 2 9	1 13 7	8 16 2	2 1 6	107.4
	March ..	7 6 9	1 14 7	9 1 1	2 2 8	113.2
	April ..	7 4 3	1 13 11	8 18 1	2 1 11	109.6
	May ..	7 2 7	1 13 7	8 16 0	2 1 5	107.2
	June ..	7 1 3	1 13 3	8 14 4	2 1 1	105.2
	July ..	7 0 10	1 13 2	8 13 10	2 0 11	104.6
	August ..	7 0 3	1 13 0	8 13 2	2 0 9	103.8
	September ..	7 1 0	1 13 2	8 14 0	2 1 0	104.8
	October ..	7 1 8	1 13 4	8 14 10	2 1 2	105.8
	November ..	7 1 3	1 13 3	8 14 5	2 1 1	105.3
	December ..	7 1 1	1 13 3	8 14 2	2 1 0	105.0
1936—						
	January ..	7 0 11	1 13 2	8 13 11	2 0 11	104.7
	February ..	7 0 11	1 13 2	8 13 11	2 0 11	104.7
	March ..	7 1 0	1 13 2	8 14 0	2 1 0	104.8
	April ..	7 0 10	1 13 2	8 13 10	2 0 11	104.6
	May ..	7 0 1	1 13 0	8 12 11	2 0 9	103.5
	June ..	6 18 8	1 12 8	8 11 2	2 0 4	101.5
	July ..	6 18 11	1 12 8	8 11 5	2 0 4	101.8
	August ..	6 18 4	1 12 7	8 10 9	2 0 2	101.0
	September ..	6 18 0	1 12 6	8 10 4	2 0 1	100.5
	October ..	7 1 11	1 13 5	8 15 2	2 1 3	106.2
	November ..	7 2 3	1 13 6	8 15 7	2 1 4	106.7
	December ..	7 1 8	1 13 4	8 14 11	2 1 2	105.9
1937—						
	January ..	7 1 8	1 13 4	8 14 11	2 1 2	105.9
	February ..	7 2 1	1 13 5	8 15 5	2 1 4	106.5
	March ..	7 2 4	1 13 6	8 15 8	2 1 5	106.8
	April ..	7 1 4	1 13 3	8 14 5	2 1 1	105.3
	May ..	7 0 7	1 13 1	8 13 7	2 0 11	104.3
	June ..	7 0 7	1 13 1	8 13 6	2 0 10	104.2
	July ..	7 0 0	1 13 0	8 12 10	2 0 8	103.5
	August ..	6 19 6	1 12 10	8 12 3	2 0 7	102.7
	September ..	7 0 4	1 13 1	8 13 3	2 0 9	103.9

NOTE.—"£s" represents £ sterling while Australian £s are indicated by "£A".

5. **Silver and Bronze Coinage.**—(i) *Prices of Silver.* The value of silver has greatly decreased since its demonetization and restricted coinage in almost the whole of Europe. A noticeable increase, however, took place for some years after 1915, the price of silver following the general trend of world prices. Its average price in the London market in recent years is shown in § 4 par. 5 of Chapter XVIII.—Mineral Industry.

(ii) *Profits on Coinage of Silver.* As sixty-six shillings are coined out of one pound troy of standard silver (.925 fine), the silver required to produce £3 6s. of coin cost, at the average 1936 London market price of 1s. 8.1d. per ounce, approximately 20s. 1d. The difference nearly represents, therefore, the gross profit or seigniorage made on the coinage of every £3 6s. Negotiations for the coinage of silver and bronze coin in Australia extended over a number of years between the Imperial authorities and the Governments of New South Wales and Victoria, but no decision was arrived at. As section 51 of the Commonwealth Constitution makes legislation concerning "currency, coinage, and legal tender" a Commonwealth matter, the question remained in abeyance until 1907, when the matter was discussed at the Colonial Conference, London, with the result that in the latter part of 1908 the Commonwealth Treasurer announced his intention of initiating the coinage. Since 1916 silver and bronze coins have been minted in Australia on behalf of the Commonwealth Treasury. It is interesting to record that an issue of crowns was made in 1936-37 when coins of this denomination to the value of £200,000 were put into circulation.

(iii) *Silver and Bronze Issues.* The total issues of silver and bronze coinage on account of the Commonwealth since 1910, as obtained from returns furnished by the Treasury, are set out in the following table:—

AUSTRALIAN MINTS.—SILVER AND BRONZE ISSUES BY TREASURY.

Year.	Silver.						Bronze.		
	5/-.	2/-.	1/-.	6d.	3d.	Total.	1d.	½d.	Total.
	£	£	£	£	£	£	£	£	£
1910 to 1930 ..	..	3,455,000	1,773,300	854,300	817,900	6,900,500	321,563	111,715	433,278
1930-31 ..	..	192,000	45,000	..	..	237,000	..	..	..
1931-32 ..	..	257,600	19,000	7,200	5,200	289,000	11,600	6,270	17,870
1932-33 ..	..	23,400	9,200	5,200	6,600	44,400	13,470	8,140	21,610
1933-34 ..	..	81,400	29,300	23,800	24,200	158,600	21,800	7,500	29,390
1934-35 ..	..	140,400	24,200	24,000	29,800	218,400	17,390	6,770	24,160
1935-36 ..	..	167,500	34,400	46,800	49,400	298,100	23,920	8,050	31,970
1936-37 ..	200,000	208,600	13,900	47,000	39,200	507,800	17,180	6,190	23,370
Total..	200,000	4,525,900	1,947,300	1,008,300	972,300	8,653,800	427,013	154,635	581,648

(iv) *Withdrawals of Worn Silver Coin.* An examination of the wear on silver coins made by the London Mint Authorities in 1909 revealed that the average life of silver coins (then .925 fine) was:—2s. pieces, 45 years; 1s., 41 years; 6d., 28 years; and 3d., 32 years. The value of worn silver coins received during 1936 was as follows:—Melbourne, nil; Perth, nil. The total withdrawals of worn silver coin to 1936 were:—Melbourne, £1,747,409; Perth, £129,738; Sydney (to 1926), £1,248,672.

6. **Australian Note Issue.**—(i) *General.* Information in some detail regarding Australian Notes has been given in earlier issues of this work. In December, 1920, the assets and liabilities of the Treasurer under the Australian Notes Act 1910-1914 were transferred to the Note Issue Department of the Commonwealth Bank and control of the Australian Note Issue was placed under the Board of Directors of this Department. Under the Commonwealth Bank Act 1924 control of the Note Issue passed to the Board of Directors of the Commonwealth Bank.

(ii) *Reserve against Note Issue.* Prior to 19th June, 1931, the reserve held in gold against the note issue was fixed at 25 per cent. of the total notes in circulation. To permit further shipments of gold to meet short-term obligations in London, an Amending Act reduced the statutory gold reserve to 15 per cent. with provision for the restoration

by graduations to 25 per cent. within a period not exceeding five years. A further Amending Act provided that portion of the note issue reserve may be held in British sterling, which was defined as follows:—(a) Balances standing to the credit of the Bank at the Bank of England or at any other of its bankers in London; (b) Bills of Exchange or advances secured thereby which will mature in not more than three months and which are payable in the United Kingdom in currency which is legal tender therein; and (c) Treasury Bills or other securities of the United Kingdom which will mature in not more than three months.

(iii) *Notes in Circulation.* Particulars of the average notes in circulation and of the gold reserve for the years 1914 and 1932 to 1936 are given in the following table:—

COMMONWEALTH NOTE ISSUE.—PARTICULARS.

Average of monthly statements for year—

Particulars.	1914.	1932.	1933.	1934.	1935.	1936.
Notes held by—	£	£	£	£	£	£
Banks ..	(a)	24,916,825	22,685,449	21,198,854	20,119,208	18,465,121
Public ..	(a)	25,740,767	25,033,410	25,872,512	27,449,147	28,972,667
Total ..	11,944,848	50,657,592	47,718,859	47,071,366	47,568,355	47,437,788
Gold Reserve(b)	5,368,822	10,616,563	11,672,099	15,524,204	15,922,404	16,001,182
Percentage of Reserve on Total Issue ..	%	%	%	%	%	%
	44.9	21.0	24.5	33.0	33.5	33.7

(a) Not available. (b) Includes English sterling in 1932 and following years. (c) Average of published figures including values expressed in £'s gold, £'s sterling and £'s Australian.

Details of the average value of each of the several denominations of Australian Notes outstanding in 1914 and from 1932 to 1936 are given in Finance Bulletin No. 27 issued by this Bureau.

7. *Legal Tender Extant.*—Accurate information regarding the amount of token money in circulation is not available, but the following table gives an estimate of the amount of legal tender extant about the middle of the years 1932 to 1936.

ESTIMATED LEGAL TENDER EXTANT.—AUSTRALIA.

Particulars.	1932.	1933.	1934.	1935.	1936.
Australian Note Issue (a)—	£'000.	£'000.	£'000.	£'000.	£'000.
Held by Banks	26,505	23,346	21,284	20,202	18,253
Held by Public	24,798	24,207	25,017	26,848	28,792
Notes of Trading Banks outstanding (b)	197	181	174	169	167
Coin—Gold—Held by Banks (c) ..	158	61	20	23	51
Held by Public .. ..	..	..	..	..	..
Silver—Held by Banks (c)	2,289	2,047	2,007	1,932	2,099
Held by Public	5,057	5,289	5,482	5,761	5,943
Bronze—Held by Banks (c)	110	105	109	106	113
Held by Public	341	364	389	420	441
Total	59,455	55,600	54,482	55,461	55,859

(a) Last Monday in June.

(b) Average for June quarter.

(c) At 30th June.

The figures given above for silver coin represent the total issues of Australian silver coin less the excess of exports of Australian coins to New Zealand and the Pacific Islands over the re-imports of Australian coins. The amount of English coin in circulation in Australia is negligible, and as it is not possible to ascertain accurately its volume, no allowance has been made therefor. The figures given for bronze coins refer to the total issues of Australian coin, the small amount of British coin in circulation being disregarded.

C.—STATE FINANCE.

§ 1. General.

1. **Functions of State Governments.**—In comparing the financial returns of the States allowance must be made for the various functions discharged by the respective Governments, and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult, owing to the fact that functions which in one State are assumed by the Central Government are in another relegated to municipal or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the Central Government. Care, therefore, is needed in instituting comparisons, and the particulars contained in this Chapter should be read with those contained in the Chapter dealing with Local Government. In many respects, moreover, the budgets of the Australian Governments differ materially from those of most European countries, owing to the inclusion therein of the revenue and expenditure of departments concerned in rendering public services, such for instance as railways, tramways, water supply, etc., which in other countries are often left to private enterprise.

2. **Accounts of State Governments.**—The various financial transactions of the States are in each case mainly concerned with one or other of three Funds—the "Consolidated Revenue Fund," the "Trust Fund," and the "Loan Fund." All revenue (except certain taxation items paid into special funds) collected by the State is placed to the credit of its Consolidated Revenue Fund, from which payments are made under the authority of an Annual Appropriation Act passed by the Legislature, or by a permanent appropriation under a Special Act. From 1st July, 1928, the accounts of the Railway and Tramway services, Sydney Harbour Trust and certain water supply services were separated from the Consolidated Revenue Fund of New South Wales. To preserve the comparability of the State finance statistics, information in respect of the above services has been included in the tabular statements in this section. The Trust Fund comprises all moneys held in trust by the Government, and includes such items as savings banks funds, sinking funds, insurance companies' deposits, etc. The Loan Fund is debited with all loan moneys raised by the State, and credited with the expenditure therefrom on public works or other purposes.

3. **Inter-relation of Commonwealth and State Finances.**—In regard to the inter-relation of Commonwealth and State Finances, a statement in some detail, covering the period from the inception of Federation to the passing of the Financial Agreement Act 1928, was published in Official Year Book, No. 22, pages 379–80. On page 890 of this issue details are given in regard to the constitutional and other requirements in the matter of the distribution of Commonwealth revenues.

§ 2. Consolidated Revenue Funds.

Division I.—Revenue.

1. **General.**—The principal sources of State revenue are:—

- (a) Taxation; (b) The business undertakings controlled by the State Governments; (c) Sale of and rental from Crown lands; (d) Payments by Commonwealth Government under the Financial Agreement and Special Grants Acts; (e) Interest on advances; and (f) Miscellaneous sources, comprising fines, fees, etc.

In regard to item (b) attention is directed to the statement (*see* C. § 1 par. 2 *ante*) appertaining to the New South Wales accounts. In connexion with the Railway Accounts for that State the Consolidated Revenue Fund contributed to the Railways Commissioners an amount not exceeding £500,000 in respect of losses on country developmental railways during each of the last five years. To avoid duplication in determining the aggregate receipts and expenditure this amount has not been included in the railways receipts or Consolidated Revenue Expenditure.

Of these sources, that yielding the largest revenue for the States as a whole is the group of Business Undertakings, the principal contributor being the Government Railways and Tramways. Next in magnitude comes Taxation, followed in order by the Commonwealth Payments and Interest Receipts.

By the Finance Adjustment and Financial Adjustment (Further Provisions) Acts 1932, the receipts and payments of the Unemployment Relief and Family Endowment Funds of New South Wales were brought into the Consolidated Revenue Fund, and the division of the Consolidated Revenue Account known as the Special Purposes (Revenue) Fund was abandoned. The figures showing receipts and expenditure include the transactions relating to the Social Services referred to.

2. Revenue Received.—The following table furnishes particulars of the total amounts and the amounts per head, of consolidated revenue received by the several States during the last five years :—

STATE CONSOLIDATED REVENUE.

Year.	N.S.W. (a)	Victoria. (a)	O'land. (b)	S. Aust.	W. Aust. (b)	Tasmania.	All States.
TOTAL COLLECTIONS.							
	£	£	£	£	£	£	£
1931-32	45,607,700	24,555,272	12,994,113	10,481,976	8,035,316	2,385,495	104,059,872
1932-33	49,329,557	24,705,985	13,396,644	10,160,712	8,332,153	2,522,191	108,447,242
1933-34	45,509,438	24,567,739	13,859,385	10,187,986	8,481,697	2,698,214	105,304,459
1934-35	46,564,814	25,766,062	15,280,022	11,001,578	9,331,430	2,872,148	110,816,054
1935-36	49,869,643	26,583,510	15,488,991	11,409,325	10,033,721	3,117,602	116,502,792

PER HEAD OF POPULATION.(c)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931-32	17 15 2	13 12 3	13 19 4	18 3 5	18 10 7	10 11 1	15 18 3
1932-33	19 0 9	13 12 3	14 4 10	17 10 8	19 1 5	11 1 4	16 9 1
1933-34	17 8 3	13 9 3	14 11 8	17 9 10	19 5 2	11 15 7	15 17 2
1934-35	17 13 6	14 0 7	15 18 1	18 16 8	21 1 2	12 10 8	16 11 5
1935-36	18 15 5	14 8 5	15 18 8	19 9 3	22 8 1	13 10 9	17 5 11

(a) Includes certain moneys not paid into Consolidated Revenue Fund, such as receipts from Railways, Tramways, Sydney Harbour Trust, certain Water Supply and Sewerage Services and motor taxation in New South Wales and motor taxation in Victoria. *See* letterpress above regarding Social Services, New South Wales. (b) Excludes motor taxation paid to Special Funds.

(c) Based on mean population of each financial year.

3. Sources of Revenue.—(i) *General.* Classifying the revenue of the several States in the manner indicated in par. 1 *ante*, particulars for the year 1935-36 are as follows :—

STATE CONSOLIDATED REVENUE.—SOURCES, 1935-36.

Particulars.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
TOTAL REVENUE.							
	£	£	£	£	£	£	£
Taxation (c) ..	16,289,722	9,920,693	4,102,084	3,204,580	2,203,169	1,418,256	37,138,504
Business Undertakings ..	24,568,233	11,406,210	6,741,810	4,549,144	5,239,870	468,956	54,974,223
Territorial ..	1,699,549	431,218	1,425,346	212,142	383,391	64,112	4,215,758
Commonwealth payments (b) ..	3,100,140	2,207,150	1,171,235	1,128,820	1,308,230	710,853	10,751,641
Interest ..	60,290	1,721,477	1,003,113	24,522	324,743	334,035	4,807,885
Miscellaneous ..	3,551,703	935,752	984,703	490,121	534,116	117,386	6,613,781
Total ..	49,869,643	26,583,510	15,488,991	11,409,325	10,033,721	3,117,602	116,502,792

PER HEAD OF POPULATION.(e)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Taxation (c) ..	6 2 8	5 7 8	4 4 5	5 9 4	4 18 5	6 3 2	5 10 3
Business Undertakings ..	(d) 9 5 0	6 3 9	6 18 8	7 15 2	11 14 0	2 0 9	7 17 4
Territorial ..	0 12 9	0 4 8	1 9 4	0 7 3	0 17 1	0 5 7	0 12 6
Commonwealth payments (b) ..	1 3 9	1 4 7	1 4 1	3 12 7	2 18 5	3 2 3	1 11 11
Interest ..	0 4 6	0 17 7	1 1 11	1 8 2	0 16 4	1 8 10	0 14 3
Miscellaneous ..	1 6 9	0 10 2	1 0 3	0 16 9	1 3 10	0 10 2	0 19 8
Total ..	18 15 5	14 8 5	15 18 8	19 9 3	22 8 1	13 10 9	17 5 11

(a) Includes certain moneys not paid into Consolidated Revenue Fund. See note (a) to table immediately preceding. (b) Including special grants. (c) In some States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page. (d) Excludes £800,000 paid to Railways Commissioners from Consolidated Revenue in respect of losses on country developmental railways. (e) Based on mean population of the financial year.

In connexion with the item Business Undertakings, it should be borne in mind that services performed by the Government in one State may, in another, be carried out by a Board or Trust. For instance, in New South Wales and Western Australia the tramway systems are controlled by the Government, while in the other States ownership is largely vested in Trusts or private companies. Harbour and river services and water supply and sewerage are also controlled in some cases by the State and in others by Trusts.

The magnitude of the revenue per head from Business Undertakings in the case of Western Australia is mainly due to railways, the mileage of which is greater per head of population than in other States. In New South Wales and Western Australia the revenue from tramways is also included.

(ii) *Revenue from Taxation.*—(a) *General.* Owing to different methods of treating motor taxation in the respective Treasurers' Statements of Accounts, particulars of State taxation collections have not always been directly comparable. The following table shows

STATE REVENUE FROM TAXATION—TOTAL COLLECTIONS, 1935-36.

(a) No special Unemployment Relief Tax collected. (b) Includes Income Tax on Lotteries, £277,312 (£1 4s. 1d. per head). (c) Includes amounts collected by local government bodies outside metropolitan area, £167,896 (7s. 6d. per head).

STATE REVENUE FROM TAXATION.—PERCENTAGES ON TOTAL, 1935-36.

[illegible]

Prior to Federation duties of Customs and Excise constituted the principal source of revenue from taxation. At present the most productive State taxes are the Unemployment Relief and Income Taxes. In addition to these, a State land tax and licence fees of various kinds are collected in all the States, and a dividend tax is levied in Western Australia.

The total amounts and the amounts per head raised from all sources of taxation by the several State Governments, including amounts not paid into the Consolidated Revenue Fund, during the five years ended 1935-36 are given in the following table :—

STATE REVENUE FROM TAXATION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States..
TOTAL.							
	£	£	£	£	£	£	£
1931-32	14,855,306	7,709,694	4,761,880	3,076,374	1,439,559	905,715	32,748,528
1932-33	18,052,914	8,301,194	5,661,151	2,733,445	1,573,451	1,003,454	37,255,609
1933-34	14,198,932	8,461,944	5,840,301	2,925,106	1,835,829	1,132,889	34,401,001
1934-35	13,990,771	8,993,718	6,540,263	3,207,000	2,430,070	1,227,328	30,461,255
1935-36	16,289,722	9,920,693	7,323,028	3,267,389	2,762,735	1,418,256	40,981,823

PER HEAD OF POPULATION.(a)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931-32	5 15 9	4 5 6	5 2 4	5 6 8	3 6 5	4 0 2	5 0 2
1932-33	6 19 4	4 11 6	6 0 4	4 14 4	3 12 0	4 8 0	5 13 3
1933-34	5 8 8	4 12 9	6 3 0	5 0 5	4 3 4	4 18 11	5 3 7
1934-35	5 6 2	4 17 11	6 16 3	5 11 10	5 9 11	5 7 1	5 9 0
1935-36	6 2 8	5 7 8	7 10 8	5 11 6	6 3 5	6 3 2	6 1 8

(a) Based on mean population of each financial year.

(b) *Probate and Succession Duties.* Probate duties have been levied for many years in all the States, but the provisions of the Acts governing the payment of duty differ widely both in regard to the ordinary rates and those which apply to special beneficiaries. A table showing the values of the estates in which probates and letters of administration were granted is given earlier. (See Chapter XXVI.—Private Finance, Section F.)

The duties collected for the last five financial years are as follows:—

STATE PROBATE AND SUCCESSION DUTIES.—COLLECTIONS.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
New South Wales ..	1,251,650	1,639,979	1,542,475	1,693,966	1,673,805
Victoria ..	1,014,669	1,164,200	1,143,330	1,124,933	1,340,701
Queensland ..	424,522	452,872	459,314	448,901	528,412
South Australia ..	323,008	299,826	298,076	315,463	233,742
Western Australia ..	63,162	91,995	70,154	74,076	112,057
Tasmania ..	86,764	117,387	156,935	70,035	111,872
Total ..	3,163,775	3,766,259	3,670,884	3,727,374	4,001,189

(c) *Other Stamp Duties.* The revenue derived from Stamp duties (exclusive of probate and succession duties and stamp duties on betting tickets) for the last five years is shown in the accompanying table:—

OTHER STATE STAMP DUTIES.—COLLECTIONS.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
New South Wales ..	813,986	929,158	1,013,604	1,084,044	1,141,305
Victoria ..	639,578	725,834	733,054	826,056	858,731
Queensland ..	418,205	423,450	446,587	501,910	545,167
South Australia ..	164,708	177,396	190,193	206,411	225,499
Western Australia ..	189,174	181,642	209,965	251,868	252,062
Tasmania ..	137,876	100,020	97,719	104,842	74,342
Total ..	2,393,527	2,537,500	2,691,122	2,975,131	3,097,106

(d) *Land Tax.* All the States impose a land tax, Queensland, the last State to fall into line, collecting its first levy in 1915-16. In the other States the impost is of long standing. In New South Wales the State land tax is levied on the unincorporated portion of the western division of the State only.

The following table shows the amounts collected by means of such taxes during the financial years 1931-32 to 1935-36:—

STATE LAND TAX.—COLLECTIONS.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
New South Wales ..	2,453	1,968	2,199	2,461	2,034
Victoria ..	497,609	503,752	535,947	494,593	494,293
Queensland ..	346,064	442,584	433,881	412,459	411,508
South Australia ..	434,544	306,198	346,411	350,832	293,842
Western Australia ..	132,368	130,963	118,973	121,895	117,682
Tasmania ..	95,916	92,823	90,812	89,863	80,494
Total ..	1,508,954	1,478,288	1,528,223	1,472,103	1,408,943

(e) *Income Tax.* A tax on the incomes of persons, whether derived from personal exertion or from property, is also imposed in all the States. As might be expected, the rates, exemptions, etc., differ widely, but the general principles of the several Acts are similar. In earlier years revenues now derived from income tax were to some extent supplied by a dividend tax mainly from profits on gold mining.

The following table shows the total amounts collected in the several States during the years 1931-32 to 1935-36. In the case of Western Australia the amount of dividend duty collected is included. The tax levied on prizes in lotteries although coming within the Income Tax class has been excluded from the amounts given below.

STATE INCOME AND DIVIDEND TAXES.—COLLECTIONS.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
New South Wales ..	3,411,146	3,870,616	2,808,851	3,146,495	4,088,164
Victoria ..	2,061,561	2,117,000	2,329,629	2,603,512	2,759,324
Queensland ..	1,652,329	1,680,383	1,007,499	1,800,477	2,295,004
South Australia ..	1,484,066	1,254,961	1,302,083	1,473,931	1,495,210
Western Australia ..	436,767	336,001	362,593	551,800	634,351
Tasmania ..	242,347	339,239	361,143	420,366	517,061
Total ..	9,288,216	9,607,200	8,771,798	9,996,581	11,789,114

(f) *Other taxes on Income.* During 1930-31 a special unemployment relief tax was levied in New South Wales, Victoria and Queensland. In South Australia portion of the moneys for expenditure on unemployment relief was raised by an increment in the rate of income tax. In Western Australia Financial Emergency and Hospital taxes are levied and in Tasmania a tax on wages provides the funds necessary for the relief of unemployment. Further references to unemployment relief taxation may be found in the Labour Report, Nos. 22 to 27.

(g) *Motor Taxation.* Motor taxation comprises tax and registration fees on motor vehicles, and licences of motor dealers, motor drivers and motor cycle riders, and public vehicles except when controlled by local government authorities. The following table shows the collections for the last five years:—

MOTOR TAXATION.—COLLECTIONS.

State.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
New South Wales ..	1,617,387	1,608,154	1,770,828	1,934,665	2,164,068
Victoria ..	1,124,302	1,222,684	1,280,878	1,403,134	1,592,880
Queensland ..	519,467	525,967	587,421	633,059	724,119
South Australia ..	499,704	503,386	529,432	565,279	608,036
Western Australia (a) ..	278,816	274,721	292,768	318,681	342,163
Tasmania ..	93,567	97,210	101,720	110,586	123,584
Total ..	4,133,303	4,232,122	4,563,047	4,965,404	5,554,850

(a) Includes amounts collected by local governing authorities outside metropolitan area.

The proceeds of motor tax and motor registration fees are now paid into a special roads fund and the amounts do not appear in the Consolidated Revenue Fund, except for the States of South Australia and Tasmania. In New South Wales a proportion of the collections is paid to Consolidated Revenue as an offset against administrative charges.

(iii) *Business Undertakings.* (a) 1935-36. A very large proportion of State gross revenues is made up of receipts from business undertakings under the control of the Governments. The principal of these are railways and tramways, harbour works, and water supply and sewerage, while, in addition, State batteries for the treatment of auriferous ores are included for Western Australia, and various minor revenue-producing services are rendered by the Governments of all States. For the year 1935-36 the revenue from these sources was £52,974,223, or 45 per cent. of the revenue from all sources. Details of revenue are as follows:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1935-36.

Particulars.	N.S.W. (g)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
	£	£	£	£	£	£	£
Railways	10,953,581	10,188,723	10,138,341	4,854,182	3,424,494	417,519	39,509,738
Tramways	3,757,746	(c) 111,658	..	..	287,103	..	4,156,507
Harbour services ..	1,040,610	69,801	97,976	657,021	296,428	..	2,161,836
Water supply and sewerage	2,816,296	(b) 634,261	..	997,618	678,824	..	5,126,999
Other .. ..	..	41,401,692	..	43,020	553,021	(e) 21,410	2,019,143
Total	24,568,233	11,406,210	6,741,810	4,549,144	5,239,870	468,956	52,974,223

(a) Includes electric tramways operated by the Railways Department.

(b) Country water supply only.

(c) Statutory contribution to revenue by Melbourne and Metropolitan Tramways Board.

(d) Mostly interest recouped from Business Undertakings outside Consolidated Revenue Fund.

(e) Includes profits of Hydro-electric Commission.

(f) Includes Omnibuses.

(g) See C § 1 par. 2.

As mentioned on page 919 the particulars shown above for New South Wales railways do not include a sum of £800,000, recouped to the Railways Commissioners from Consolidated Revenue in respect of losses on operating country developmental railways. The figures for Railways in South Australia include £120,000, portion of Commonwealth Grant which was credited direct to Railways accounts.

(b) 1931-32 to 1935-36. Particulars of the revenue from Business Undertakings for the last five years are given below:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS.(a)

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Railways and Tramways ..	39,822,890	10,190,873	39,503,110	44,322,041	43,000,245
Harbour Services	1,761,715	1,859,527	1,808,055	2,002,710	2,161,836
Water Supply and Sewerage	5,189,034	5,163,810	4,820,220	4,851,223	5,126,999
Other	2,364,205	2,131,230	2,141,945	2,027,049	2,019,143
Total	49,137,844	49,345,446	48,282,330	51,206,023	52,974,223

(a) See notes to previous table.

(iv) *Territorial.* The revenue from the sale and rental of Crown lands has, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and has been applied to meet ordinary expenses. Where the rentals received are for lands held for pastoral or residential purposes such application of the revenue would appear justifiable. On the other hand, where the rentals are for mineral and timber lands, and in all cases of sales of lands, the proceeding is essentially a disposal of capital to defray current expenses, and is, therefore, open to criticism. The following table gives the revenue from sales and rentals of Crown lands for the year 1935-36:—

STATE TERRITORIAL REVENUE, 1935-36.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
	£	£	£	£	£	£	£
Sales . . .	52,134	104,116	..	23,535	10,018	10,097	199,900
Conditional Purchase	774,935	..	..	19,593	83,637	..	878,165
Rentals . . .	774,155	175,845	1,122,569	169,014	155,418	27,156	2,424,157
Forestry ..	98,325	151,257	302,777	..	134,318	20,859	713,536
Total ..	1,699,549	431,218	1,425,346	212,142	383,391	64,112	4,215,758

(v) *Commonwealth Payments.* The payments to the States (inclusive of special grants but excluding the contributions in respect of sinking fund on States' Debts and Federal Aid Roads grants which are paid by the Commonwealth into the National Debt Sinking Fund and Federal Aid Roads Trust Fund respectively and certain other grants paid into trust or special accounts) represent in each instance a considerable proportion of the States' revenue, and for the year 1935-36 aggregated £10,752,641, or 9 per cent. of the total revenue of the States.

(vi) *Interest and Miscellaneous.* In addition to the foregoing, there are in each State several miscellaneous sources of revenue, including such items as interest, fines, fees, etc. In 1935-36 interest, mainly from loans to local governing bodies and on public account balances, was responsible for £4,807,885, whilst "Miscellaneous" revenue which includes fines of the courts and fees for services amounted to £6,613,781.

Division II.—Expenditure.

1. *General.*—The principal heads of State expenditure from Consolidated Revenue Funds are:—

- (a) Interest and sinking funds in connexion with public debt; (b) Working expenses of railways and tramways; (c) Justice; (d) Police; (e) Penal establishments; (f) Education; (g) Health and charitable expenditure; and (h) All other expenditure.

In earlier years the working expenses of Railways and Tramways were the most important item in Governmental expenditure, but in recent years Public Debt charges represent the heaviest item, notwithstanding the reduction in interest as a result of the 1931 internal conversion loan and the more recent conversion operations in London. Prior to 1930-31 Railway working expenses represented about 30 to 35 per cent. of the total, but staff reductions and other economies effected in consequence of the industrial depression reduced the figure to 26 per cent. in 1933-34. For the year 1935-36 the percentage rose slightly to 27, compared with 35 per cent. represented by Public Debt Charges; next in importance were Charitable, Public Health and Hospitals, 11 per cent.; Education, 9 per cent.; and Law and Order, 4 per cent.

2. **Total Expenditure.**—The total expenditure from Consolidated Revenue Funds in the several States and the expenditure per head of population during each of the last five years are given in the table hereunder:—

STATE EXPENDITURE.—CONSOLIDATED REVENUE FUNDS.

Year.	N.S.W. (a) (b)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
TOTAL.							
	£	£	£	£	£	£	£
1931-32	59,834,538	26,163,594	15,069,293	11,545,336	9,593,212	2,657,109	124,863,082
1932-33	52,960,277	25,547,480	14,951,088	11,169,010	9,190,234	2,577,407	116,402,102
1933-34	48,925,538	25,336,797	14,987,916	11,031,802	9,270,609	2,746,099	112,298,761
1934-35	48,803,577	25,917,259	15,844,933	10,995,352	9,498,525	2,991,349	114,080,695
1935-36	51,608,092	26,909,971	16,230,806	11,260,360	9,945,343	3,247,288	118,991,860
PER HEAD OF POPULATION.(c)							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931-32	23 6 0	14 10 1	16 3 11	20 0 3	22 2 5	11 15 1	19 1 11
1932-33	20 8 10	14 1 6	15 17 11	19 5 6	21 1 0	11 6 2	17 13 3
1933-34	18 14 5	13 17 8	15 15 5	18 18 10	21 0 11	11 19 9	16 18 2
1934-35	18 11 0	14 2 3	16 9 10	18 15 5	21 8 8	13 1 1	17 1 2
1935-36	19 8 6	14 9 9	16 13 11	19 4 2	22 4 2	14 2 0	17 13 3

(a) Includes expenditure of certain moneys not paid into Consolidated Revenue, such as receipts from Railways, Tramways, Sydney Harbour Trust, certain Water Supply and Sewerage Services, and motor taxation in New South Wales and motor taxation in Victoria. (b) Includes Social Services. Refer to letterpress on page 919. (c) Based on mean population of each financial year.

3. **Details of Expenditure for 1935-36.**—The following table shows the total expenditure and expenditure per head under each of the principal items:—

STATE EXPENDITURE.—DETAILS, 1935-36.

Particulars.	N.S.W. (c)	Victoria. (c)	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
TOTAL.							
	£	£	£	£	£	£	£
Public debt (interest, sinking fund, exchange, etc.) ..	716,005,707	7,968,950	6,295,433	4,953,729	4,030,250	1,142,511	40,396,580
Railways and Tramways (working expenses) ..	115,084,955	66,441,275	65,082,673	62,211,618	2,704,956	655,948	32,085,025
Water Supply and Sewerage (f) ..	9803,467	308,034	228,136	300,279	265,120	..	1,765,036
Justice ..	528,251	228,086	175,484	82,428	76,062	39,717	1,130,027
Police ..	1,532,508	714,097	523,871	270,897	230,033	106,801	3,378,207
Penal establishments	325,425	114,115	56,472	43,019	29,155	17,541	566,327
Education ..	4,259,401	2,764,375	1,553,431	972,352	758,862	325,112	10,633,534
Health and charitable	7,092,170	3,281,791	1,000,166	1,000,166	1,165,152	441,811	13,395,083
All other expenditure	5,915,199	4,890,335	1,468,840	1,366,373	1,385,453	609,241	15,641,441
Total ..	51,608,092	26,909,971	16,230,806	11,260,360	9,945,343	3,247,288	118,991,860
PER HEAD OF POPULATION.(i)							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Public debt (interest, sinking fund, etc.) ..	6 0 6	4 6 6	6 9 6	8 9 0	9 0 0	4 19 3	5 19 11
Railways and Tramways (working expenses) ..	5 13 7	3 9 11	5 4 7	3 15 5	6 0 10	2 8 7	4 15 3
Water Supply and Sewerage ..	0 6 6	0 3 4	0 0 7	0 10 3	0 11 10	..	0 5 3
Justice ..	0 4 0	0 2 6	0 3 7	0 2 10	0 3 5	0 3 5	0 3 4
Police ..	0 11 6	0 7 9	0 10 9	0 9 3	0 10 3	0 9 3	0 10 0
Penal establishments	0 2 5	0 1 3	0 0 9	0 1 0	0 1 4	0 1 6	0 1 8
Education ..	1 12 1	1 10 0	1 12 0	1 13 2	1 13 11	1 8 3	1 11 7
Health and charitable	2 13 5	1 15 4	1 1 11	1 16 2	1 10 9	1 18 10	1 19 10
All other expenditure	2 4 6	2 13 2	1 10 3	2 6 7	3 1 10	2 12 11	2 6 5
Total ..	19 8 6	14 9 9	16 13 11	19 4 2	22 4 2	14 2 0	17 13 3

(a) Includes electric tramways operated by the Victorian Railways. (b) Railways only. (c) Includes expenditure of certain moneys not paid into Consolidated Revenue, see note (a) to previous table. (d) Excludes £800,000 paid from Consolidated Revenue Fund on account of losses on country developmental railways. (e) Water Supply and Irrigation Commission only. (f) Includes Water Conservation and Irrigation—New South Wales, £87,416 and South Australia £70,170. (g) Includes Metropolitan Water, Sewerage and Drainage Board outside Consolidated Revenue Fund. (h) In addition £268,069 was expended from Hospital Fund. (i) Based on mean population of the financial year.

Division III.—Surplus Revenue.

The following table shows for each of the years 1931-32 to 1935-36 the amount and amount per head of the surplus or deficit of each State:—

STATE SURPLUS REVENUE.

Year.	N.S.W.(a)	Victoria.(a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
	£	£	£	£	£	£	£
1931-32..	-14,226,838	-1,608,322	-2,075,180	-1,063,360	-1,557,896	-271,614	-20,803,210
1932-33..	-3,630,720	-841,501	-1,554,444	-1,008,898	-864,081	-55,216	-7,954,860
1933-34..	-3,416,100	-769,058	-1,128,531	-843,816	-788,912	-47,885	-6,994,302
1934-35..	-2,298,763	-151,197	-564,611	36,226	-167,095	-119,201	-3,264,641
1935-36..	-1,738,449	-116,461	-741,815	148,965	88,378	-129,686	-2,489,068

PER HEAD OF POPULATION.(b)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931-32..	-5 10 10	-0 17 10	-2 4 7	-1 16 10	-3 11 10	-1 4 0	-3 3 8
1932-33..	-1 8 0	-0 9 3	-1 13 1	-1 14 10	-1 19 7	-0 4 10	-1 4 2
1933-34..	-1 6 2	-0 8 5	-1 3 9	-1 9 0	-1 15 10	-0 4 2	-1 1 1
1934-35..	-0 17 6	-0 1 8	-0 11 9	0 1 3	-0 7 6	-0 10 5	-0 9 9
1935-36..	-0 13 1	-0 1 4	-0 15 3	0 5 1	0 3 11	-0 11 3	-0 7 4

NOTE.—Minus sign (—) indicates deficit.

(a) After allowing for payments into and expenditure from certain special funds.

(b) Based on mean population of each financial year.

§ 3. State Trust Funds.

1. *Nature.*—In addition to the moneys received as revenue and paid to the credit of Consolidated Revenue Funds, considerable sums are held by the State Governments in trust for various purposes. Municipal sinking funds placed in the hands of the Governments are paid to the credit of the appropriate Trust Fund. In all the States except New South Wales, where the practice is confined to those companies transacting workers' compensation insurance, life assurance companies operating are required to deposit a substantial sum in cash or approved securities with the Government, and these deposits help to swell the trust funds. Various other deposit accounts, superannuation funds, suspense accounts, etc., also find a place.

2. *Extent.*—The amount of trust funds held on the 30th June, 1936, was as follows:—

STATE TRUST FUNDS, 30th JUNE, 1936.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	All States.
	£	£	£	£	£	£	£
Amount of trust funds	15,033,653	7,278,647	3,024,791	1,231,701	3,550,140	1,052,467	31,171,399

(a) Includes Colonial Treasurer's Supreme Court Accounts.

§ 4. State Loan Funds.

Division I.—Loan Expenditure.

1. *General.*—As far back as the year 1842 revenue collections were supplemented with borrowed moneys, the earliest loan being by New South Wales for the purpose of assisting immigration, at rates of interest varying from 2½d. to 5½d. per £100 per diem, or approximately from 4½ per cent. to 8 per cent. per annum. Australian public borrowing, however, is mainly due to the fact that the State Governments, in addition to ordinary administrative duties, undertake functions which in other countries are usually entrusted to local authorities or left to private enterprise. Foremost amongst these are the construction and control of the railway systems, but loan moneys have largely been used for improvements to harbours and rivers, and the construction of roads, water supply and sewerage works. The State loan expenditure and public debt thus differ very materially from those of most European countries, and from those of the Commonwealth, where such expenditure was very largely incurred for purposes of

defence, or in the prosecution of war. As shown above, the State debts consist chiefly of moneys raised and expended with the object of assisting the development of the resources of the country, and are to a very large extent represented by tangible assets.

Statements relating to Loan Expenditure are given below for both the "gross" and the "net" expenditure during the year. The gross expenditure represents the amounts disbursed during the year whereas the net expenditure represents the gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc. It might be mentioned that such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made.

2. **Loan Expenditure, 1935-36.**—(a) *Gross Loan Expenditure, 1935-36.* Particulars of the gross loan expenditure for the year 1935-36 are given in the following table:—

STATE GROSS LOAN EXPENDITURE, 1935-36.

Heads of Expenditure.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways	2,582,007	280,900	693,712	434,091	11,675	215,613	4,453,907
Tramways	135,900	..	..	(b) 100,000	..	..
Roads	230,763	112,183	305,058	..	..	..
Bridges	1,786	..	..	..	..	..
Harbours and Rivers ..	168,348	..	118,588	95,639	68,549	70,450	1,171,964
Lights and Lighthouses ..	..	..	..	..	..	..
Water Supply	958,359	285,473	..	304,625	16,405	..	
Sewerage	404,807	..	..	84,299	53,496	..	
Electricity Supply	38,959	..	..	..	257,168	859,415	1,155,542
Public Buildings	143,327	866	191,178	111,307	36,877	88,412	1,182,107
Loans to Local Bodies (a)	3,391,065	2,544,870	1,430,951	40,000	1,857,115	..	9,287,045
Unemployment Relief ..	..	..	..	..	..	23,044	
Advances for Housing ..	80,000	913	393,082	21,505	500	27,756	
Other Public Works .. ..	..	..	..	166,112	94	15,893	
Primary Production—							
Soldier Settlement .. ..	..	209,274	6,085	22,817	427	127,846	366,449
Land for Settlement .. ..	..	255,728	276,442	16,819	..	28,874	577,863
Water Conservation .. ..	..	..	..	486	26,063	..	827,552
Irrigation and Drainage ..	672,379	..	92,265	15,958	20,401	..	
Rabbit-proof Fencing .. ..	..	19,444	36,564	3,521	..	..
Agriculture	369,806	..	13,122	..	39,540	..	
Agricultural Bank .. ..	..	..	225,017	..	..	..	59,529
Advances to Settlers .. ..	..	..	..	..	..	..	422,468
Forestry .. ..	..	46,793	107,000	156,582	9,615	62,036	225,017
Mines and Mineral Resources .. ..	..	..	35,461	..	38,843	..	719,410
Other .. ..	..	..	..	45,523	..	..	310,375
Other Purposes	13,093	..	3	509,516	27,396	..	74,304
							550,008
Total Public Works, Services, etc., Expenditure	9,490,608	3,841,452	4,228,148	2,698,638	2,464,167	1,519,369	24,242,382
Per head of Population	£3 11 5	£2 1 8	£4 7 0	£4 12 1	£3 10 1	£6 11 11	£3 12 0
Other than Works, etc.—							
Exchange, Discounts and Flotation Expenses	1,580,268	51,619	..	36,133	31,357	..	1,699,377
Revenue and General Cash Deficits	2,865,482	58,000	741,815	..	..	339,094	4,004,301
Other .. ..	..	..	100,000	..	..	..	100,000
Total Non-Works, etc., Expenditure	4,445,750	109,619	841,815	36,133	31,357	339,094	5,803,768
Grand Total	13,936,358	3,951,071	5,069,963	2,734,771	2,495,524	1,858,463	30,046,150

(a) Includes Grants. (b) Loans to Local Bodies for Tramways. (c) Expenditure charged to Loan Account. Expenditure from Loan Suspense Account not included until charged to Loan Account. (d) Expenditure from Loan and on account of Loan; includes expenditure from Public Account Advances Account, from Treasurer's Advance Account and from State Loans Repayment Fund.

(b) *Net Loan Expenditure, 1935-36.* For the year ended 30th June, 1936, State net loan expenditure on Public Works amounted to £18,750,209, while expenditure on services other than works was £5,708,452, making an aggregate for the year of £24,458,661. Details for the year for each State are given in the following table:—

STATE NET LOAN EXPENDITURE, 1935-36.

Heads of Expenditure.	New South Wales. (i)	Victoria. (a)	Queensland.	South Australia. (j)	Western Australia. (h)	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways	2,201,837	120,224	693,830	420,232	11,675	47,659	3,437,000
Tramways	Cr. 122,650	..	..	(c) 65,800	..	..	..
Roads	135,357	82,528	275,110	..	119	..	..
Bridges	Cr. 3,241	Cr. 5,484	..	..	..	..	..
Harbours and Rivers ..	164,565	Cr. 2,289	117,320	7,144	68,497	69,437	908,825
Lights and Lighthouses ..	..	..	..	..	..	..	..
Water Supply	951,811	255,940	..	272,810	15,482	..	1,496,052
Sewerage	390,516	(b) Cr. 995	..	64,468	34,102	..	488,091
Electricity Supply	37,800	..	..	257,168	36,846	800,000	1,094,908
Public Buildings	440,936	..	180,109	110,919	..	52,177	1,128,214
Loans to Local Bodies ..	..	Cr. 3,985	(f) 1,029,810	(f) 21,541	805	Cr. 288,170	..
Unemployment Relief ..	2,810,680	..	..	..	..	..	7,938,496
Works .. ..	..	2,499,775	..	1,857,115	9,505	..	..
Advances for Housing ..	80,000	913	92,864	Cr. 110,004	Cr. 2,416	510	60,817
Other .. ..	..	..	77,634	..	79	8,272	85,985
Primary Production—							
Soldier Settlement	(d) Cr. 520	28,827	48,103	Cr. 36,081	Cr. 56,878	40,780	180,417
Land for Settlement .. ..	..	113,022	222,008	Cr. 129,004	..	11,480	..
Water Conservation	543,002	..	69,161	86,729	25,827	..	743,182
Irrigation and Drainage ..	..	..	..	Cr. 1,868	20,271	..	..
Rabbit-proof Fencing ..	(e) Cr. 4,609	..	14,494	Cr. 3,647	..	..	6,238
Agriculture	304,555	..	2,784	..	36,045	..	403,384
Agricultural Bank .. ..	..	..	Cr. 40,187	..	..	..	40,187
Advances to Settlers	(e) Cr. 4,357	..	..	105,180	8,780	Cr. 8,400	101,209
Forestry .. ..	..	46,793	101,071	45,233	..	..	193,097
Mines and Mineral Resources	Cr. 196	Cr. 8,133	26,632	..	28,915	..	47,218
Other .. ..	..	..	..	6,844	..	..	6,844
Other Purposes	Cr. 16,131	Cr. 9,115	Cr. 30,163	(g) 509,360	15,670	..	409,621
Total Public Works Services, etc., Expenditure	7,978,321	3,115,982	3,006,370	1,632,400	2,356,260	660,876	18,750,209
Per head of Population	£3 0 0	£1 13 10	£3 1 10	£2 15 8	£5 5 3	£2 17 5	£2 15 8
Other than Works, etc.—							
Exchange, Discount and Flotation Expenses ..	1,580,268	51,619	..	29,195	31,357	..	1,692,439
Revenue and General Cash Deficits	2,805,482	58,000	741,815	..	Cr. 88,378	339,094	3,916,613
Other .. ..	..	..	100,000	..	..	..	100,000
Total Non-Works, etc., Expenditure	4,445,750	109,619	841,815	29,195	Cr. 57,021	339,094	5,708,452
Grand Total	12,424,071	3,225,601	3,848,185	1,661,595	2,299,239	999,970	24,458,661

(a) Expenditure from Loan and on account of Loan; includes expenditure from Public Account Advances Account, from Treasurer's Advance Account, and from State Loans Repayment Fund. (b) Country towns.
 (c) Loans to Local Bodies for Tramways. (d) Includes Rabbit-proof Fencing and Advances to Settlers.
 (e) Included with Soldier Settlement, &c. (f) Includes grants. (g) Includes State Bank £500,000.
 (h) Expenditure charged to Loan Account. Expenditure from Loan Suspense Account not included until charged to Loan Account. (i) Credits on account of amounts written off indebtedness in respect of Soldier Land Settlement Advances (£931,222) and transfers from Special Deposits Account (£321,661) not allowed for. (j) Credits arising from the cancellation of securities redeemed from Sinking Fund not allowed for.

3. Net Loan Expenditure on Works, Services, etc. 1931-32 to 1935-36.—The following table gives the works net loan expenditure during each of the years 1931-32 to 1935-36:—

STATE NET LOAN EXPENDITURE ON WORKS, SERVICES, ETC.

Year.	N.S.W.	Victoria.	Q'land.(a)	S. Aust. (c)	W. Aust.(e)	Tasmania.	All States.
TOTAL.							
	£	£	£	£	£	£	£
1931-32	3,387,143	1,002,224	Cr. 7,986	550,626	1,267,865	26,254	6,226,126
1932-33	4,319,766	2,094,271	672,474	901,473	2,048,224	Cr.74,907	9,961,301
1933-34	7,003,812	2,190,550	1,717,182	947,785	2,563,087	118,783	14,541,199
1934-35	9,724,462	1,786,860	3,169,072	495,479	2,633,678	361,495	18,635,046
1935-36	67,978,321	3,115,982	3,006,370	1,632,400	2,356,260	660,876	18,750,209

PER HEAD OF POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1931-32	1 6 5	0 11 1	Cr.0 4 5	0 19 1	2 18 6	0 2 4	0 19 1
1932-33	1 13 4	1 3 1	0 14 4	1 11 1	4 13 9	Cr.0 6 7	1 10 3
1933-34	2 13 7	1 4 0	1 16 2	1 12 7	5 16 5	0 10 4	2 3 8
1934-35	3 13 10	0 19 6	3 6 0	1 12 10	5 18 10	1 11 7	2 15 9
1935-36	3 0 0	1 13 10	3 1 10	2 15 8	5 5 3	2 17 5	2 15 8

(a) Figures for each year are exclusive of £200,000 portion of repayments transferred to Consolidated Revenue and applied to Sinking Fund contributions. For the year 1931-32 repayments exclude £298,365 transferred from Governments Savings Bank Inscribed Stock Account. (b) Credits on accounts of amounts written off indebtedness in respect of Soldier Land Settlement advances (£934,722) and transfers from Special Deposits account (£321,661) not allowed for. (c) Credits arising from the cancellation of securities redeemed from Sinking Fund not allowed for. (d) Amounts of £804,988 written off Public Debt and £88,782 adjustment of interest pursuant to Soldier Settlement Agreement not allowed for. (e) Expenditure charged to Loan. Expenditure from Loan Suspense Account not included until charged to Loan Account.

The loan expenditure per head of population, which varies in the different States and in different years, reached its highest point for the five years under review in 1934-35 with £2 15s. 9d. per head, and its lowest in 1931-32 with 19s. 1d. per head.

4 Total Loan Expenditure to 30th June, 1936.—The total loan expenditure inclusive of revenue deficits, etc., of the States from the initiation of borrowing to the 30th June, 1936, amounted to £938,443,085. The purposes for which this sum was expended are shown in the following table:—

TOTAL STATE LOAN EXPENDITURE TO 30th JUNE, 1936.

Heads of Expenditure.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways ..	146,716,614	74,780,077	63,471,984	34,225,173	24,767,222	7,109,190	351,070,260
Tramways ..	9,182,119	..	..	63,468,195	1,107,553	..	13,757,867
Roads and Bridges ..	26,756,428	12,237,256	3,638,442	3,219,745	3,278,503	..	85,301,512
Harbours, Rivers, Lighthouses ..	20,539,933	990,506	2,554,563	8,103,714	6,967,547	7,014,875	..
Water Supply ..	24,780,632	29,109,449	..	14,347,775	8,194,113	..	76,431,960
Sewerage ..	16,307,896	(d) 217,784	..	3,280,373	2,040,364	..	22,746,417
Electricity Supply ..	1,307,352	17,839,227	..	..	1,673,282	4,805,641	25,625,502
Public Buildings ..	13,630,428	9,419,077	4,959,446	3,554,435	1,907,308	1,915,899	32,386,593
Loans to Local Bodies (h) ..	15,197,277	1,827,664	15,725,478	529,263	91,809	845,332	40,754,030
Unemployment Relief ..	..	6,355,894	..	..	..	181,313	..
Advances—Housing ..	1,004,344	913	4,314,415	5,747,473	726,815	178,466	11,972,426
Commonwealth Services ..	3,965,937	149,323	524,388	1,283,387	332,293	270,634	6,525,962
Other Public Works and Services ..	49,855	1,330,283	..	77,634	1,178,447	1,339,284	3,975,503
Primary Production—							
Soldier Settlement ..	23,967,584	28,007,227	1,390,034	8,703,296	7,217,762	2,619,961	..
Land for Settlement ..	..	13,265,968	..	1,598,468	324,662	405,017	94,940,806
Closer Settlement ..	9,329,128	..	2,981,410	..	..	..	..
Advances to Settlers ..	(f) ..	2,164,272	..	3,304,046	9,319,607	341,964	..
Water Conservation ..	..	..	..	1,405,329	1,687,015	..	..
Irrigation and Drainage ..	14,765,225	..	2,141,412	7,444,211	1,795,290	..	28,638,482
Rabbit Proof Fencing ..	(f) ..	812,192	334,260	240,361	341,765	..	1,728,578
Agricultural Bank ..	..	..	1,675,506	..	5,878,695	..	7,554,201
Agriculture ..	27,200,426	150,682	47,208	..	3,581,218	..	10,979,534
Mines and Mineral Resources ..	580,936	520,421	1,942,494	..	2,754,705	..	5,798,556
Other ..	..	642,451	1,428,590	1,701,005	628,016	..	4,400,062
Other Purposes ..	23,819,256	1,041,975	5,909,775	(i) 2,743,200	3,580,892	335,971	17,431,069
Total Public Works, Services, &c., Expenditure ..	309,101,770	197,862,641	113,039,405	104,977,083	89,674,883	27,363,547	842,019,329
Other than Works, etc.—							
Exchange on Re-mittances ..	16,009,033	..	..	..	..	..	26,392,877
Discounts and Flotation Expenses ..	..	5,566,033	..	959,971	3,857,840	(g) ..	..
Revenue and General Cash Deficits ..	36,141,116	4,083,682	3,989,401	8,608,592	11,368,234	835,366	65,026,391
Treasury Bills Retired ..	..	..	4,185,338	..	..	..	4,185,338
Other ..	120,050	..	700,000	..	..	..	820,050
Grand Total ..	361,371,969	207,512,356	121,914,144	114,545,646	104,900,957	28,198,913	938,443,985

(a) Includes Grain Elevators. (b) Loans to Local Bodies for Tramways. (c) Includes Industrial Undertakings. (d) Country sewerage. (e) Includes Advances to Settlers and Rabbit Proof Fencing. (f) Included with Soldier Settlement, &c. (g) Included with Other Public Works. (h) Includes Grants. (i) Includes State Bank.

The figures in the table show the amounts actually spent, and differ from those given later in the statements relating to the public debt, which represent the amount of loans still unpaid. The statement above includes all expenditure, whether the loans have been repaid or are still in existence. In the public debt statement, however, loans repaid are not included, and in the case of loans still outstanding, each is shown according to the amount repayable at maturity, and not according to the amount originally available for expenditure.

Division II.—State Public Debts.

1. General.—The first government loan raised in Australia was obtained by New South Wales in 1842. This and nine other loans prior to 1855 were all procured locally. In the last-mentioned year New South Wales approached the London market for the first instalment of a 5 per cent. loan for £83,300. Victoria first appeared as a borrower in 1854, and made its first appearance on the London market in 1850. The first public loans were raised by the other States in the following years :—Queensland 1861, South Australia 1856, Western Australia 1845, and Tasmania 1867.

2. State Debts, 1933 to 1937.—The table hereunder shows the State public debts and the amounts owing per head of population at the 30th June in each year from 1933 to 1937 inclusive. The totals include sums advanced by the Commonwealth to the States for settling returned soldiers on the land, and for this reason they differ in some cases from those given in some previous issues. On the transfer of the Queensland State Savings Bank business to the Commonwealth Bank in 1920, Queensland Government securities were handed to the latter for the Savings Bank current account credit balance and for amounts owing on account of Advances to Settlers and Workers' Dwellings. This transaction added a total of £5,930,910 to the Public Debt without involving any additional borrowing.

As provided in the Financial Agreement Act 1928 (particulars of which are given in Chapter I., pages 21 to 33), the Commonwealth Government on 1st July, 1929, assumed the liabilities of the States to bondholders in respect of the debts of the States existing at 1st July, 1929, and taken over by the Commonwealth. Reference is made in Chap. IV. of this volume to certain remissions which the Commonwealth Government made to the States on account of losses sustained by the States in connexion with soldier land settlement; the States' debts were so reduced by £5,000,000 as from 1st October, 1925, and by a further £2,597,753 as from 30th June, 1927. The following figures which represent the total "face" or "book" value of the debt of States leaving out of account currency changes since the loans were floated have been adjusted on this account, and therefore differ from those given in some earlier issues :—

STATE PUBLIC DEBTS.

Date.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	All States.
TOTAL.							
30th June, 1933	£ 314,067,707	£ 169,238,072	£ 114,530,854	£ 102,902,345	£ 83,514,697	£ 23,597,945	£ 807,851,620
" 1934	324,666,868	177,972,786	117,312,353	104,044,242	85,347,502	23,949,918	829,508,022
" 1935	337,101,269	174,160,663	118,846,753	105,349,536	88,590,176	23,915,354	847,963,751
" 1936	346,576,294	175,058,285	122,647,234	105,698,431	90,344,055	24,418,156	864,742,505
" 1937	350,291,499	176,597,010	124,898,475	106,594,164	92,332,855	25,247,540	875,961,543
PER HEAD OF POPULATION.(a)							
30th June, 1933	£ s. d. 120 15 1	£ s. d. 92 19 6	£ s. d. 120 17 5	£ s. d. 177 2 7	£ s. d. 190 6 1	£ s. d. 103 33 8	£ s. d. 122 2 1
" 1934	123 16 4	94 10 10	123 0 4	179 7 2	194 4 3	103 15 0	124 10 2
" 1935	127 9 2	94 15 2	122 15 8	180 2 10	198 15 5	104 11 2	126 7 6
" 1936	129 18 10	94 15 5	125 2 9	180 1 4	200 6 5	106 3 4	127 17 6
" 1937	130 1 10	95 3 4	125 17 11	181 1 6	203 5 5	108 43 10	128 10 5

(a) Based on population at 30th June in each year.

The public debt of the whole of the States increased during the period under review by nearly £68 million or at the rate of £17 million per annum. The debt per head of population increased during the period by £6 8s. 4d. to £128 10s. 5d. per head or slightly more than 5 per cent. In some States certain public functions such as Tramways, Water Supply and Sewerage, and Harbour Services, etc., are controlled by Boards or Trusts which, in addition to receiving advances from the Central Government, raise loans by public borrowing on their own behalf, while in other States these services are controlled by the

Central Governments. Comparisons of the debts of the States are therefore difficult, but on page 945 figures showing the aggregate debts of the States including these local and semi-governmental bodies are given for the year 1934-35.

3. **Place of Flotation of Loans.**—As pointed out previously, the early loans, usually for comparatively small amounts, were raised locally, but, with the increasing demand for loan funds and the more favourable terms offering in the London market, the practice of raising loans in London came into vogue, and for many years local flotations, except for short terms or small amounts, were comparatively infrequent. In more recent years, however, the accumulating stocks of money in Australia seeking investment have led to the placing of various redemption and other loans locally, with very satisfactory results. Moreover, loans have been placed in New York on account of all States. The following table gives particulars of loans outstanding on the 30th June, 1937, which had been floated abroad and in Australia respectively :—

STATE PUBLIC DEBTS, 30th JUNE, 1937.—PLACE OF FLOTATION OF LOANS.

State.	Floated Abroad.			Floated in Australia.	Grand Total.
	London.	New York.	Total Overseas.		
	£ Stg.	£ (b)	£ (a)	£ Aust.	£ (a)
New South Wales	160,541,620	13,071,098	173,612,718	176,678,781	350,291,499
Victoria ..	62,849,805	4,530,842	67,380,647	109,216,363	176,597,010
Queensland ..	63,171,171	7,139,474	70,310,645	54,587,830	124,898,475
South Australia	43,296,157	1,746,382	45,042,539	61,551,625	106,594,164
Western Australia	44,286,745	2,030,334	46,317,079	46,015,776	92,332,855
Tasmania ..	13,488,237	229,779	13,718,016	11,529,524	25,247,540
Total ..	387,633,735	28,747,909	416,381,644	459,579,899	875,961,543

PER HEAD OF POPULATION.

	£ s. d. (Stg.)	£ s. d. (b)	£ s. d. (a)	£ s. d. (Aust.)	£ s. d. (a)
New South Wales	59 12 5	4 17 1	64 9 6	65 12 4	130 1 10
Victoria ..	33 17 5	2 8 10	36 6 3	58 17 1	95 3 4
Queensland ..	63 13 6	7 3 11	70 17 5	55 0 6	125 17 11
South Australia..	73 11 0	2 19 4	76 10 4	104 11 2	181 1 6
Western Australia	97 9 11	4 9 5	101 19 4	101 6 1	203 5 5
Tasmania ..	58 1 4	0 19 10	59 1 2	49 12 8	108 13 10
Total ..	56 17 6	4 4 4	61 1 10	67 8 7	128 10 5

(a) Total "face" or "book" value of the debt of each State without adjustment on account of currency changes since the loans were floated. (b) See note (c) page 899.

Particulars of the aggregate debts of the States for the last five years showing the amounts which will mature overseas and in Australia respectively will be found on page 940.

4. **Rates of Interest.**—(i) *At 30th June, 1937.* As mentioned previously, the highest rate of interest paid for the earliest State loans was 5½d. per £100 per diem, or, approximately, 8 per cent. per annum. At present the rates vary from 7 per cent. to 1½ per cent., thirty-two separate rates being involved. The average rate payable on the aggregate indebtedness is about £3 15s. per cent. For the separate States the average varies, being lowest for New South Wales and highest for Queensland. The following table gives particulars of the amount of debt at each rate of interest payable, together with the amount and the average rate of interest payable at 30th June, 1937, with separate information for London, New York and Australian maturities. The units of currency in this table are—for debts maturing and interest payable—

in Australia .. £ Australian.

in London .. £ Sterling.

in New York .. Payable in terms of dollars. See note on page 899.

STATE PUBLIC DEBTS.

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The totals given represent the total "face" or "book" value of the debts of each State without adjustment on account of currency changes since the loans were floated, and the nominal amount (and average rate) of interest payable, taking no account of exchange:—

STATE PUBLIC DEBTS.—RATES OF INTEREST PAYABLE AT 30th JUNE, 1937.

Rate of Interest.	Place of Maturity.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	All States.
%		£	£	£	£	£	£	£
7.0.	New York	..	..	1,843,522	..	..	..	1,843,522
6.0	New York	..	..	2,054,865	..	..	..	2,054,865
5.25	London	17,870,500	..	..	8,000	250,000	261,240	17,870,500
5.0375	Australia	3,035	..	..	..	..	..	522,275
5.0	London	17,094,010	14,150,131	37,501,088	13,910,287	12,098,012	1,238,087	97,503,071
	New York	9,170,408	5,753,442	2,200,000	1,710,382	2,030,334	239,779	19,139,301
4.75	London	..	5,999,000	..	..	..	..	5,999,000
4.65	Australia	572,911	..	..	1,200	1,217,972	200,000	1,992,083
4.5	New York	3,892,033	777,440	1,040,148	..	..	..	5,710,221
4.2625	Australia	2,121,000	193,206	2,180,120	160,140	62,797	..	4,732,317
4.06875	Australia	11,241,140	10,700	..	795,000	377,002	750	12,426,522
4.0(b)	Australia	67,042,590	53,524,523	15,425,766	37,041,003	17,930,506	7,503,050	109,067,456
	London	29,441,932	2,902,410	8,000,000	5,000,385	7,680,385	2,800,000	50,048,203
3.96667	Australia	..	5,685,910	..	985,000	..	..	5,685,910
3.89167	Australia	..	..	..	..	..	..	985,000
3.875	Australia	3,157,250	5,062,333	2,758,000	3,425,475	1,814,650	430,130	16,748,846
3.75	London	240,73,820	160,73,815	8,539,453	5,988,080	6,397,811	1,355,720	63,728,719
3.625	Australia	7,772,032	6,887,649	1,908,300	5,410,300	1,934,301	1,070,000	25,077,182
3.5	Australia	..	877,000	..	..	277,930	27,200	1,182,130
3.4875	London	4,428,150	3,012,513	1,381,572	1,483,150	1,708,751	71,850	12,449,321
3.42083	Australia	3,431,001	10,715,995	0,607,000	5,310,770	4,721,105	6,150,500	80,063,377
3.375	Australia	..	500	6,239,850	83,050	1,705,558	151,501	8,300,650
3.375	London	7,100,310	1,535,430	765,710	1,533,050	1,009,620	153,290	13,308,440
3.25	Australia	5,085,700	9,234,505	1,417,442	750,000	2,000,205	180,880	10,248,792
3.125	Australia	2,000	1,000	70,000	325,230	..	..	398,230
3.1	London	479,811	391,049	5,277,206	..	1,566,000	201,302	7,915,368
3.02083	Australia	..	2,482,000	..	..	..	..	2,482,000
3.0	London	17,951,762	3,777,145	7,563,807	3,892,183	2,839,002	819,002	36,842,901
	Australia	33,202,113	6,224,014	4,266,113	2,433,490	..	416,300	40,510,439
2.90625	Australia	77,850	220,000	5,100	29,721	..	..	332,671
2.75	London	10,054,600	..	..	1,996,335	3,308,661	..	16,170,596
2.7125	Australia	294,421	440,545	354,925	197,992	..	..	1,289,173
2.5	London	9,965,276	5,884,825	..	2,815,726	2,998,014	..	21,663,841
2.325	Australia	645,652	778,083	54,750	373,451	..	..	50,000
2.0	London	..	..	..	1,000,000	..	..	1,851,936
1.75	Australia	30,560,000	3,088,000	2,543,000	3,350,000	5,325,000	491,000	1,491,000
Overdue	Australia	90	..	110	..	..	..	200
	London	8,650	..	..	..	..	..	8,650
Total Debt	Australia	170,078,781	100,216,303	51,587,830	61,351,025	160,015,776	11,529,534	150,570,890
	London	100,341,805	62,949,805	13,171,171	43,296,157	44,267,745	13,486,237	387,033,735
	New York	13,071,098	4,530,842	7,139,474	1,746,382	2,030,334	229,779	28,747,900
	Total	350,201,199	176,507,010	124,808,175	106,501,104	92,332,855	25,247,510	875,964,513
Total Interest payable	Australia	6,022,051	4,038,557	1,023,632	2,281,048	1,623,840	443,941	16,333,969
	London(a)	5,080,701	2,417,174	2,760,686	1,670,005	1,609,788	494,504	15,070,888
	New York	631,000	222,658	469,193	87,319	101,517	11,480	1,400,204
	Total	12,636,846	6,678,386	5,122,511	4,048,272	3,425,122	949,094	32,871,121
Average Rates of interest payable	Australia	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	London	3 8 2	3 13 11	3 10 6	3 14 2	3 10 8	3 17 1	3 11 1
	New York	3 14 6	3 16 11	4 8 9	3 17 7	3 16 0	3 13 4	3 17 0
	Total	1 17 0	4 18 3	5 14 8	5 0 0	5 0 0	5 0 0	5 2 0

(a) Includes contributions payable by Commonwealth and British Governments towards the Migration Loans.

(b) Includes unconverted.

The average rate of interest payable shows a very substantial decrease due to the internal debt conversion in July and August, 1931, which is referred to in the Appendix. The average rate for debt maturing in Australia has been reduced from £5 4s. 9d. per cent. in 1931 to £3 11s. 1d. per cent. in 1937. For debt maturing in London the average rate increased from £4 12s. 7d. per cent. in 1931 to £4 13s. 3d. in 1932, but, as a result of the conversions effected in London prior to 30th June, 1937, fell to £3 17s. 9d., while for New York loans it decreased from £5 2s. 6d. per cent. in 1931 to £5 2s. in 1937.

(ii) *Variations from 1901 to 1937.*—The variations in the rates of interest payable on the public debts of the States are shown in the following table which gives the percentages of the total debts in various interest groups during the years specified, and the average rate of interest in each year :—

STATE PUBLIC DEBTS.—PERCENTAGES, ETC., IN VARIOUS INTEREST GROUPS.

Interest Rates.	Percentage of Total Debt at 30th June—						
	1901.	1911.	1921.	1931.	1935.	1936.	1937.
	%	%	%	%	%	%	%
Not exceeding 3 per cent.	18.0	17.9	10.2	5.3	15.8	18.3	19.9
Exceeding 3 per cent. but not exceeding 4 per cent. ..	78.5	81.9	45.4	17.2	59.1	60.3	60.1
Exceeding 4 per cent. but not exceeding 5 per cent. ..	3.1	0.1	15.6	36.8	22.2	18.8	17.5
Exceeding 5 per cent. but not exceeding 6 per cent. ..	0.4	0.1	23.5	38.4	2.7	2.4	2.3
Exceeding 6 per cent. ..	..	..	5.3	2.3	0.2	0.2	0.2
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Rate ..	3.7	3.6	4.4	4.0	3.0	3.8	3.8

5. *Dates of Maturity.*—Securities like the British Consols are interminable, but Australian debts have in most cases a fixed date for repayment, there being a few exceptions which are included in the following table under the headings "interminable," "Treasurer's option," and "not fixed." Those terminable at "Treasurer's option" include amounts which are payable by the respective Governments after giving a specified notice, and those "not fixed" consist of certain amounts owing to the Commonwealth Government. Generally, renewal is effected at date of maturity in respect of the greater portion of the loan. In order to avoid application to the market at an unfavourable time, several States adopted the practice of specifying a period prior to the date of maturity within which the Government, on giving twelve, or in some cases six months' notice, has the option of redeeming the loan. The Government can, therefore, take advantage of opportunities that may offer during the period for favourable renewals. Particulars concerning the due dates of the State loans outstanding on the 30th June, 1937, are given in the following table, the various maturities being grouped according to years ending 30th June.

Where the Government has the option of redemption during a specified period the loan is classified according to the latest date of maturity.

**STATE PUBLIC DEBTS.—LATEST DATE OF MATURITY OF AMOUNT
OUTSTANDING ON 30th JUNE, 1937.**

Year of Maturity (Ended 30th June).	Maturing in London.	Maturing in New York.	Total Matur- ing Overseas.	Maturing in Australia.	Grand Total.
	£ Stg.	£ (b)	£ (a)	£ Aust.	£ (a)
1938	34,564,806	..	34,564,806	50,639,471	85,204,277
1939	2,358,276	..	2,358,276	47,318,565	49,676,841
1940	4,604,800	..	4,004,800	16,718,514	21,323,314
1941 .. .. .	..	..	..	8,753,896	8,753,896
1942	13,469,981	1,843,522	15,313,503	69,104,250	84,417,753
1943	16,179,596	..	16,179,596	27,859,167	44,038,763
1944 .. .. .	..	..	..	11,215,850	11,215,850
1945	3,985,000	..	3,985,000	26,476,873	30,461,873
1946 .. .. .	..	..	..	16,500	16,500
1947	5,684,214	2,054,865	7,739,079	1,237,928	9,227,007
1948 .. .. .	..	..	..	16,339,144	16,339,144
1949	38,648,687	..	38,648,687	39,479,475	69,128,162
1950	6,082,195	..	6,082,195	24,801,589	30,883,784
1951	20,579,928	..	20,579,928	16,074,697	36,654,625
1952 .. .. .	..	..	..	17,285,216	17,285,216
1953	12,360,958	..	12,360,958	491,718	12,852,676
1954	5,946,925	..	5,946,925	15,254,635	21,201,560
1955	3,250,204	..	3,250,204	778,078	4,028,282
1956 .. .. .	..	10,524,842	10,524,842	34,614,521	25,139,363
1957 .. .. .	..	4,582,965	4,582,965	349,085	4,929,050
1958	38,652,500	9,741,715	48,394,215	14,472,449	62,866,664
1959	21,239,050	..	21,239,050	548,227	21,787,277
1960	3,850,724	..	3,850,724	15,339,844	19,190,568
1961	33,923,518	..	33,923,518	1,141,981	35,065,499
1962	4,964,083	..	4,964,083	14,231,530	19,195,613
1963	10,392,396	..	10,392,396	106,804	10,499,200
1964 .. .. .	..	..	..	1,566,000	1,566,000
1966	14,130,000	..	14,130,000	..	14,130,000
1970	1,970,300	..	1,970,300	..	1,970,300
1971	9,322,446	..	9,322,446	..	9,322,446
1975	13,693,528	..	13,693,528	..	13,693,528
1976	65,283,071	..	65,283,071	50,064	65,333,135
Overdue (c)	8,650	..	8,650	450	9,100
Interminable	1,200	..	1,200	462,089	463,289
Treasurer's Option	2,433,499	..	2,433,499	6,568,232	9,001,731
Half-yearly Drawings	53,200	..	53,200	4,750,249	4,803,449
Not fixed .. .. .	..	..	..	4,294,208	4,294,208
Total	387,633,735	28,717,909	416,381,644	459,579,899	875,961,543

(a) Total "face" or "book" value of the Public Debt of the States without adjustment on account of currency changes since the loans were floated. (b) See note (c) on page 899. (c) Includes unconverted.

6. **Sinking Funds.**—Prior to the passing of the Financial Agreement Act 1928, the practice of providing sinking funds by the States had been consistently followed in Western Australia only. This State had established sinking funds in connexion with each of its loans the contributions to which varied from 1 per cent. to 3 per cent. per annum of the nominal amount of the loan. The funds are placed with trustees in London, by whom they are invested in securities, and applied from time to time to the redemption of loans falling due. In the other States the sinking fund provision varies, consisting in certain instances of the revenues from specified sources, in others of the Consolidated Revenue Fund surplus, and in others again of fixed annual amounts. The Financial Agreement Act 1928 contains provisions for the establishment of a sinking fund

on States' debts, and details are included in Part III., Section 3 of the Financial Agreement between the Commonwealth and States which is shown in Chapter I., pages 21 to 33, of this volume. Details of the transactions of the National Debt Sinking Fund (States' Account) for 1935-36 are given in the Finance Bulletins issued by this Bureau.

D. COMMONWEALTH AND STATE FINANCE.

1. Revenue and Expenditure.—The following tables show the aggregate revenue and expenditure of the Commonwealth and States for each of the five years to 1935-36, allowance having been made in cases of duplication:—

COMMONWEALTH AND STATES.—REVENUE.

Year ended 30th June—	Revenue collected by Commonwealth Government.(a)	Revenue collected by State Governments.(b)	Total.
	£	£	£
1932	70,139,488	94,924,960	165,064,448
1933	72,143,014	99,032,330	171,175,344
1934	72,597,082	95,589,547	168,186,629
1935	75,956,678	100,831,142	176,787,820
1936	81,923,489	106,130,151	188,053,640

(a) Excluding Interest on Loans to States for Soldier Land Settlement, Miscellaneous Loans, and Balance of Interest on States' Debts. (b) Excluding Payments by Commonwealth Government under "Surplus Revenue", "Special Grants", "Financial Agreement", and "Federal Aid Roads" Acts.

COMMONWEALTH AND STATES.—EXPENDITURE.

Year ended 30th June—	Expenditure by Commonwealth Government.(a)	Expenditure by State Governments.	Total.
	£	£	£
1932	61,004,576	124,863,082	185,867,658
1933	(b) 59,181,494	116,402,102	175,583,596
1934	(b) 61,580,600	112,298,761	173,879,361
1935	(b) 65,260,563	114,080,695	179,341,258
1936	(b) 67,983,128	118,991,860	186,974,988

(a) Excluding Payments to States and Interest on States' Debts, etc. (b) Payments to States by Commonwealth for relief of Wheat-growers and other Primary Producers not deducted.

2. Taxation.—The table hereunder shows the combined Commonwealth and State taxation for each of the years 1931-32 to 1935-36, as well as the amount per head of population. Certain taxation collections by the State Governments which are not paid into the Consolidated Revenue Fund have been included :—

TOTAL COMMONWEALTH AND STATE TAXATION.

Particulars.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.
	£	£	£	£	£
Commonwealth—					
Customs and Excise ..	28,405,796	32,992,443	34,254,842	37,869,486	41,437,717
Sales Tax ..	8,425,007	9,369,275	8,605,686	8,554,976	9,432,408
Flour Tax ..	..	..	1,253,957	798,354	1,150,738
Other ..	17,128,179	13,784,318	12,204,240	11,532,608	11,596,383
Total ..	53,959,042	56,146,036	56,408,728	58,754,524	63,617,306
State ..	32,748,528	37,325,609	34,401,001	36,461,255	40,981,823
Grand Total ..	86,707,570	93,471,645	90,809,729	95,215,779	104,599,129
Taxation per head (a)—					
Commonwealth—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Customs and Excise ..	4 6 8	4 19 11	5 2 11	5 13 0	6 2 9
Sales Tax ..	1 15 9	1 8 5	1 6 2	1 5 6	1 7 11
Flour Tax ..	..	..	0 3 9	0 2 5	0 3 5
Other ..	2 2 3	2 1 8	1 16 8	1 14 5	1 14 5
Total ..	8 4 8	8 10 0	8 9 6	8 15 4	9 8 6
State ..	5 0 2	5 13 3	5 3 7	5 9 0	6 1 8
Grand Total ..	13 4 8	14 3 1	13 12 11	14 4 1	15 9 11

(a) Based on mean population of each financial year ; that for States, on the aggregate mean population of the six States.

3. **Public Debt.**—(i) *General.* The table hereunder shows the public debt of the Commonwealth and of the States at the 30th June in each of the years 1933 to 1937. In this table all moneys borrowed by the Commonwealth on behalf of the States have been included with State debts only, and similarly, the debts taken over by the Commonwealth from South Australia on account of the Northern Territory and of the Port Augusta-Oodnadatta Railway have been included with the Commonwealth Debt:—

COMMONWEALTH AND STATES' PUBLIC DEBTS.

		At 30th June—				
Particulars.	Where Redeemable.	1933.	1934.	1935.	1936.	1937.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
Commonwealth ..	Aust. ..	221,274,296	218,806,160	220,391,289	218,403,098	214,929,762
	London	158,642,224	157,533,140	157,233,140	156,285,327	155,778,627
	New York	16,889,983	16,711,476	16,526,641	16,351,176	16,201,952
	Total (b)	396,806,503	393,050,776	394,151,070	391,039,601	386,910,341
States ..	Aust. ..	386,113,942	410,478,856	429,701,893	447,258,509	450,579,899
	London	392,156,891	389,792,322	389,223,822	388,575,335	387,633,735
	New York	29,580,787	29,236,844	29,038,036	28,908,661	28,747,909
	Total (b)	807,851,620	829,508,022	847,963,751	864,742,505	875,961,543
Total, Commonwealth and States	Aust. ..	607,388,238	629,285,016	650,093,182	665,661,607	674,509,661
	London	550,799,115	547,325,462	546,456,962	544,860,662	543,412,302
	New York	46,470,770	45,948,320	45,564,677	45,259,837	44,949,861
	Grand Total (b)	1,204,658,123	1,222,558,798	1,242,114,821	1,255,782,106	1,262,871,884

(a) The units of currency are—

For debt maturing in Australia	..	..	..	£ (Aust.)
For debt maturing in London	..	..	..	£ (Stg.)
For debt maturing in New York	..	..	..	..

* Payable in terms of dollars. See note (c) on page 941.

(b) The "face" or "book" value of the debts without adjustment on account of currency changes since the loans were floated.

(ii) *Dates of Maturity.* The particulars given in the appended table show as at 30th June, 1936, the amounts of Commonwealth and States' securities maturing in Australia and overseas according to year of maturity, together with the amount of interest payable yearly thereon. It should be noted that the year of maturity is given for fiscal years ended 30th June and for that reason the information is not directly comparable with statements published in issues of the Official Year Book prior to No. 24. Debts with optional dates of maturity, representing about 75 per cent. of the total overseas obligations, have been grouped according to the latest year of maturity.

COMMONWEALTH AND STATES' PUBLIC DEBTS, 30th JUNE, 1936.—
DATES OF MATURITY.

Year of Maturity.	Commonwealth and States' Debts.				Annual Interest Payable at 30th June, 1936, in respect of Commonwealth and States' Debts Maturing in the Years stated.			
	Maturing in Australia.	Maturing in London.	Maturing in New York.	Total.	Interest Payable.			
					In Australia.	In London.	In New York.	Total.
	£ (a)	£ (Stg.)	£ (c)	£ (a)	£ (a)	£ (Stg.)	£ (c)	£ (b)
1936-37	69,746,843	36,340,630	..	106,087,482	1,443,810	922,730	..	2,366,549
1937-38	4,531,244	2,377,923	..	28,302,167	103,305	831,983	..	995,288
1938-39	86,995,663	2,517,799	..	89,513,462	3,403,471	88,123	..	3,491,594
1939-40	17,165,952	4,604,800	..	21,770,752	549,171	158,927	..	708,098
1940-41	9,656,166	..	..	9,656,166	335,966	..	..	335,966
1941-42	90,365,730	13,469,981	1,843,522	105,679,233	3,618,895	104,100	129,047	4,152,042
1942-43	32,009,507	..	..	32,009,507	1,219,729	..	..	1,219,729
1943-44	11,683,240	..	..	11,683,240	420,932	..	..	420,932
1944-45	51,381,641	3,985,000	..	55,366,641	1,969,849	139,470	..	2,109,319
1945-46	16,500	10,954,600	..	10,971,100	453	492,957	..	493,410
1946-47	1,280,000	..	2,051,965	3,331,965	48,792	177,940	23,992	349,099
1947-48	38,335,501	..	..	38,335,501	1,522,680	..	..	1,522,680
1948-49	28,172,802	9,682,687	..	37,855,489	1,354,806	..	..	1,354,806
1949-50	25,381,334	6,082,195	..	31,463,529	901,516	212,877	..	1,114,393
1950-51	30,048,428	20,579,928	..	50,628,356	1,194,891	764,298	..	1,959,189
1951-52	9,660,656	..	..	9,660,656	360,820	..	..	360,820
1952-53	491,718	..	..	491,718	17,149	..	..	17,149
1953-54	28,582,312	10,841,225	..	48,423,537	1,139,561	714,046	..	1,883,607
1954-55	778,078	3,250,204	..	4,028,282	30,140	113,757	..	143,897
1955-56 .. ..	..	..	1,313,111	1,313,111	1,193,511	..	1,177,991	2,371,501
1956-57	346,685	..	4,627,042	4,973,727	13,867	..	231,352	245,111
1957-58	27,107,505	39,527,500	12,209,596	78,844,601	1,083,141	1,587,911	610,480	3,281,532
1958-59	548,227	21,319,550	..	21,867,777	19,188	740,184	..	769,372
1959-60	27,935,125	3,850,724	..	31,785,849	1,106,764	151,808	..	1,258,572
1960-61	1,141,981	56,329,835	..	57,471,816	34,259	2,361,171	..	2,395,430
1961-62	26,011,590	4,964,083	..	30,975,673	1,040,464	198,563	..	1,239,027
1962-63	106,804	10,392,396	..	10,499,200	3,311	415,696	..	419,007
1963-64	1,566,000	..	..	1,566,000	48,546	..	..	48,546
1964-65 .. ..	..	..	..	..	..	..	..	..
1965-66 .. ..	..	16,761,165	..	16,761,165	..	824,903	..	824,903
1966-67 .. ..	..	..	..	..	..	..	..	..
1967-68 .. ..	..	..	..	..	..	..	..	..
1968-69 .. ..	..	..	..	..	..	..	..	..
1969-70 .. ..	..	1,970,300	..	1,970,300	..	68,961	..	68,961
1970-71 .. ..	..	9,322,446	..	9,322,446	..	372,898	..	372,898
1971-72 .. ..	..	..	..	..	..	..	..	..
1972-73 .. ..	..	..	..	..	..	..	..	..
1973-74 .. ..	..	..	..	..	..	..	..	..
1974-75 .. ..	..	14,050,306	..	14,050,306	..	456,635	..	456,635
1975-76	50,064	94,439,565	..	94,489,629	1,552	4,721,979	..	4,723,531
Overdue	(d) 70,310	8,650	..	(d) 78,969	1,276	..	..	1,276
Interminable ..	462,089	1,200	..	463,289	15,217	60	..	15,277
Treasurers' Option ..	6,568,232	2,433,526	..	9,001,758	189,316	73,006	..	262,352
Half-yearly Drawings ..	5,072,847	..	..	5,072,847	168,051	..	..	168,051
Annual Repayments ..	..	79,724,221	..	79,724,221	..	(e)	..	(e)
Transferred Properties ..	111,125	..	..	111,125	3,889	..	..	3,889
Indefinite	4,521,369	..	..	4,521,369	147,037	..	..	147,037
Total	565,661,607	544,860,662	45,259,837	1,255,782,106	24,208,727	18,485,544	2,272,162	44,966,433

(a) The total "face" or "book" value of the Public Debt, leaving out of account currency changes since the loans were floated. (b) Net interest payable takes no account of exchange. (c) Payable in terms of Dollars. For the purposes of this table, Dollars have been arbitrarily converted at the rate of \$1.8665 to £1. (d) Includes £7,580 unconverted. (e) Interest payable in terms of Dollars.

(iii) *Rates of Interest, 30th June, 1937.* The amount of Commonwealth and States' Public Debt at each rate of interest (internal and external debt shown separately) is given in the following table :—

COMMONWEALTH AND STATES' PUBLIC DEBTS, 30th JUNE, 1937.—AMOUNT AT EACH RATE OF INTEREST.

Rate of Interest.			Commonwealth and States' Debt maturing—			
			In Australia.	In London.	In New York.	Total.
%			£ (Aust.)	£ (Stg.)	£ (c)	£ (b)
7.0	..	..	..	..	1,843,522	1,843,522
6.0	..	..	..	..	2,054,865	2,054,865
5.25	..	..	..	17,870,500	..	17,870,500
5.0375	..	..	522,275	..	..	522,275
5.0	..	..	5,658	126,749,566	31,508,887	158,264,111
4.91667	..	..	..	79,724,220	..	79,724,220
4.75	..	..	..	11,999,000	..	11,999,000
4.65	..	..	2,331,203	..	..	2,331,203
4.5	..	..	..	..	9,542,587	9,542,587
4.45625	..	..	84,650	..	..	84,650
4.2625	..	..	5,694,238	..	..	5,694,238
4.25	..	..	90,105	..	..	90,105
4.06875	..	..	15,692,702	..	..	15,692,702
4.0	..	..	377,413,706	56,648,268	..	434,061,974
3.96667	..	..	5,685,910	..	..	5,685,910
3.89167	..	..	985,000	..	..	985,000
3.875	..	..	25,525,413	..	..	25,525,413
3.75	..	..	66,975,629	38,960,482	..	105,936,111
3.625	..	..	1,182,130	..	..	1,182,130
3.5	..	..	13,417,756	80,222,900	..	93,640,656
3.4875	..	..	8,300,659	..	..	8,300,659
3.42083	..	..	1,130,950	..	..	1,130,950
3.375	..	..	13,966,550	..	..	13,966,550
3.25	..	..	19,342,082	35,228,007	..	54,570,089
3.125	..	..	398,230	..	..	398,230
3.1	..	..	7,915,368	..	..	7,915,368
3.02083	..	..	2,482,000	..	..	2,482,000
3.0	..	..	44,408,963	46,574,366	..	90,983,329
2.96625	..	..	333,875	..	..	333,875
2.75	..	..	..	16,551,402	..	16,551,402
2.7125	..	..	1,291,181	..	..	1,291,181
2.5	..	..	50,000	..	..	50,000
2.325	..	..	1,851,936	..	..	1,851,936
2.25	..	..	..	30,384,001	..	30,384,001
2.0	..	..	..	2,491,000	..	2,491,000
1.75	..	..	57,376,805	..	..	57,376,805
Overdue (a)	..	..	54,687	8,650	..	63,337
Total	..	..	674,509,661	543,412,362	44,949,861	1,262,871,884
Average Rate of Interest	..	..	£ s. d. 3 12 11	£ s. d. 3 18 1	£ s. d. 5 0 5	£ s. d. 3 16 0

(a) Excludes unconverted securities. (b) Total "face" or "book" value of the Public Debt without adjustment on account of currency changes since the loans were floated. (c) See note (c) on page 941.

(iv) *Interest Payable.* The table hereunder shows the interest payable on the public debt of the Commonwealth and of the States at the 30th June in each of the years 1933 to 1937:—

COMMONWEALTH AND STATES' PUBLIC DEBTS, INTEREST PAYABLE.

Particulars.		At 30th June.				
		Where Payable.				
		1933.	1934.	1935.	1936.	1937.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
Commonwealth ..	Australia ..	8,597,237	8,462,330	8,437,021	8,366,944	8,250,125
	London (d) ..	3,805,859	3,420,780	3,108,395	3,077,601	3,040,262
	New York ..	823,249	814,616	805,973	797,954	790,935
	Total (b) ..	13,226,365	12,703,756	12,351,389	12,242,499	12,081,322
States ..	Australia ..	14,500,728	15,074,057	15,297,303	15,841,783	16,333,969
	London (c) ..	17,279,585	16,111,780	15,883,742	15,407,943	15,070,888
	New York ..	1,509,006	1,490,270	1,480,500	1,474,208	1,466,264
	Total (b) ..	33,289,319	32,676,107	32,661,545	32,723,934	32,871,121
Total Commonwealth and States	Australia ..	23,097,985	23,536,387	23,734,324	24,208,727	24,584,094
	London (d) ..	21,085,444	19,538,560	18,992,137	18,485,544	18,111,150
	New York ..	2,332,255	2,304,916	2,286,473	2,272,162	2,257,199
	Total (b) ..	46,515,684	45,379,863	45,012,934	44,966,433	44,952,443
Average Rate per cent.	Australia ..	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	London ..	3 16 1	3 14 10	3 13 0	3 12 9	3 12 11
	New York ..	4 7 8	4 3 7	4 1 5	3 19 6	3 18 1
		5 0 5	5 0 4	5 0 4	5 0 5	5 0 5
	Total (b) ..	4 2 8	3 19 5	3 17 5	3 16 6	3 16 0

(a) The units of currency are—

For interest payable in Australia £ (Aust.)
 For interest payable in London £ (Stg.)
 For interest payable in New York *

* Payable in terms of dollars, see note (c) on page 941.

(b) The nominal amount and average rate of interest payable taking no account of exchange.

(c) Includes contributions payable by Commonwealth and British Governments towards interest on Migration Loans.

(d) Excludes suspended interest on War Debt due to the Government of the United Kingdom.

(v) *Short-term Debt.* (a) *Amount.* Particulars of the short-term debt (Treasury Bills and Debentures) of the Commonwealth and States in London and in Australia at intervals from 30th June, 1930, to 30th June, 1937, are given in the following table:—

COMMONWEALTH AND STATES.—SHORT TERM DEBT.(a)

Date.	Maturing in London.			Maturing in Australia.		
	Commonwealth.	States.	Total.	Commonwealth.	States.	Total.
	£'000 Stg.	£'000 Stg.	£'000 Stg.	£'000 Aust.	£'000 Aust.	£'000 Aust.
30th June, 1930	175	4,825	5,000	..	2,300	2,300
30th June, 1931	10,220	27,855	38,075	5,066	15,554	20,620
30th June, 1932	10,220	27,105	37,325	6,330	38,660	44,990
30th June, 1933	10,220	23,905	34,125	3,500	45,375	48,875
30th September, 1933	10,220	23,905	34,125	..	50,700	50,700
31st December, 1933	10,220	23,655	33,875	..	50,820	50,820
31st March, 1934	10,220	23,405	33,625	..	51,250	51,250
30th June, 1934	10,220	23,405	33,625	..	48,469	48,469
30th September, 1934	10,220	23,405	33,625	..	51,033	51,033
31st December, 1934	10,220	23,405	33,625	..	51,068	51,068
31st March, 1935	10,220	23,405	33,625	..	48,888	48,888
30th June, 1935	10,220	23,405	33,625	..	45,124	45,124
30th September, 1935	10,220	23,155	33,375	..	47,800	47,800
31st December, 1935	10,220	23,155	33,375	..	51,080	51,080
31st March, 1936	10,220	23,155	33,375	..	48,750	48,750
30th June, 1936	10,220	23,155	33,375	..	47,013	47,013
30th September, 1936	10,220	23,155	33,375	..	48,778	48,778
31st December, 1936	9,720	23,155	32,875	..	53,584	53,584
31st March, 1937	9,720	23,155	32,875	..	52,854	52,854
30th June, 1937	9,720	23,155	32,875	..	40,408	40,408

(a) Exclusive of overdrafts.

The foregoing figures do not include overdrafts. At the 30th June, 1930, approximately £29,000,000 of London unfunded debt was on account of overdrafts. This amount was covered by the issue of Treasury Bills and Debentures during 1930-31, and at the 30th June, 1931, London overdrafts amounted to £5,000,000.

(b) *Interest rates.* (i) *London.* The rates of interest payable on Treasury Bills and Debentures in London during the period 1929-30 to 1936-37 were as follows:—

Year.					Minimum Rate.	Maximum Rate.
1929-30	..	..	..	..	0	0
1930-31	..	..	..	..	5½	£6 2s. 8d.
1931-32	..	..	..	..	3	5
1932-33	..	..	..	..	3	6½
1933-34	..	..	..	..	2	4½
1934-35	..	..	..	..	2	3
1935-36	..	..	..	..	2	3
1936-37	..	..	..	..	2	2½

(ii) *Australia.* The Treasury Bills rates in Australia were as follows:—

- 5½ per cent. from 10th October, 1929.
- 6 per cent. from 1st October, 1930.
- 4 per cent. from 31st July, 1931.
- 3½ per cent. from 27th October, 1932.
- 3½ per cent. from 21st January, 1933.
- 2½ per cent. from 18th February, 1933.
- 2½ per cent. from 1st June, 1933.
- 2½ per cent. from 1st April, 1934.
- 2 per cent. from 15th October, 1934.
- 1½ per cent. from 1st January, 1935.

(vi) *Debts of States and Municipal and Semi-Governmental Bodies.* For the reasons indicated in paragraph 2, Division II. § 4 (page 933) direct comparisons of the debts of the several States should be made with caution. The table following shows for 1934-35 particulars of the debts of the States and the debts due to the Public Creditor by Municipal and Semi-Governmental bodies in each State, together with totals for 1932-33 and 1933-34. This affords a more reliable comparison, but as complete records are not available for a long period, particulars showing comparisons of the growth of the debt cannot be made.

**PUBLIC DEBT—STATES, MUNICIPAL AND SEMI-GOVERNMENTAL BODIES,
1932-33 to 1934-35.**

State.	Due to Public Creditor.(b)				Grand Total.
	Debts of the States. (a)	Municipal.	Semi-Governmental Bodies.		
	£'000.	£'000.	£'000.	£'000.	
New South Wales	337,101	34,650	37,319		409,070
Victoria	174,161	11,863	37,221		223,245
Queensland	118,847	15,965	1,520		136,332
South Australia	105,349	625	959		106,933
Western Australia	88,590	3,164	96		91,850
Tasmania	23,915	2,673	115		26,703
Total, All States {	1934-35 ..	847,963	68,940	(c) 77,230	994,133
	1933-34 ..	829,508	67,888	51,275	948,671
	1932-33 ..	807,852	68,662	47,056	923,570

DEBT PER HEAD OF POPULATION.

	£	£	£	£
New South Wales	127.5	13.1	14.1	154.7
Victoria	94.8	6.5	20.3	121.6
Queensland	122.8	16.4	1.6	140.8
South Australia	180.1	1.1	1.6	182.8
Western Australia	198.8	7.1	0.2	206.1
Tasmania	104.6	11.7	0.5	116.8
Total, All States {	1934-35 ..	127.4	10.3	11.5
	1933-34 ..	124.5	10.2	7.7
	1932-33 ..	122.1	10.4	7.1

(a) Includes amounts due by Municipal and Semi-Governmental bodies. (b) Excluding debts due to Central Government. (c) The increase is due mainly to the inclusion of particulars for several authorities, details for which were not previously collected.

4. **The Australian Loan Council.** The Australian Loan Council was created during 1923-24 as the result of representations made by the Commonwealth Government, and had for its object the prevention of competition in the loan market. Until July, 1925, the Council consisted of representatives (usually the Treasurers) of the Commonwealth and of each of the States; in August of that year the representative of New South Wales withdrew from the Council, but rejoined at the end of 1927.

Prior to the passing of the Financial Agreement Validation Act 1929, the Australian Loan Council functioned on a purely voluntary basis. The Act referred to embodies the agreement between the Commonwealth and State Governments, and invests the Loan Council with full constitutional authority. Details of the constitution of the Loan Council are included in Part I., section 3 of the Financial Agreement and may be found in Chapter I., pp. 23-25 of this volume.

The present objects and powers of the Loan Council as a constitutional body are set out in the Financial Agreement Act.

CHAPTER XXVIII.

MISCELLANEOUS.

§ 1. Patents, Trade Marks and Designs.

1. *Patents.*—(i) *General.* The granting of patents is regulated by the Commonwealth Patents Act 1903-1935, which, in regard to principle and practice, has the same general foundation as the Imperial Statutes, modified to suit Australian conditions. The Act is administered by a Commissioner of Patents. Fees totalling £10 are sufficient to obtain letters patent for the Commonwealth of Australia and the Territories of Papua, New Guinea and Norfolk Island. A renewal fee of £5 is payable before the expiration of the seventh year of the patent on all patents granted on applications lodged prior to 2nd February, 1931. On patents granted on applications made on or after the 2nd February, 1931, renewal fees are payable as follows:—£1 before the expiration of the fifth year and an amount progressively increasing by ten shillings before the expiration of each subsequent year up to the fifteenth, when the fee becomes £6. If a renewal fee is not paid when it becomes due, an extension of time up to twelve months may be granted on grounds specified in the Act, and subject to the payment of prescribed fees.

(ii) *Summary.* The number of separate inventions in respect of which applications were filed during the years 1932 to 1936 is given in the following table, which also shows the number of letters patent sealed in each year:—

PATENTS, AUSTRALIA.—SUMMARY.

Particulars.	1932.	1933.	1934.	1935.	1936.
No. of applications	5,148	5,040	4,984	5,110	5,484
No. of applications accompanied by provisional specifications ..	3,783	3,511	3,280	3,148	2,324
Letters patent sealed during each year	2,341	1,701	2,003	2,120	2,129

(iii) *Revenue.* The revenue of the Commonwealth Patent Office during the years 1932 to 1936 is shown hereunder:—

PATENTS, AUSTRALIA.—REVENUE.

Particulars.	1932.	1933.	1934.	1935.	1936.
	£	£	£	£	£
Fees collected under Patents Act	32,015	30,121	33,488	35,980	37,515
Receipts from publications	1,381	1,311	1,359	1,532	1,569
Total	33,396	31,432	34,847	37,512	39,084

2. *Trade Marks and Designs.*—(i) *Trade Marks.* Under the Trade Marks Act 1905 the Commissioner of Patents is also Registrar of Trade Marks. This Act has been amended from time to time, the last amendment having been made in 1936. Special

provisions for the registration of a "Commonwealth Trade Mark" are contained in the Act of 1905, and are applicable to all goods included in or specified by a resolution passed by both Houses of Parliament that the conditions as to remuneration of labour in connexion with the manufacture of such goods are fair and reasonable.

(ii) *Designs.* The Designs Act 1900, as amended by the Patents, Designs and Trade Marks Act 1910 and the Designs Acts 1912, 1932, 1933 and 1934, is now cited as the Designs Act 1900-1934. Under this Act a Commonwealth Designs Office has been established, and the Commissioner of Patents appointed "Registrar of Designs."

(iii) *Summary.* The following table shows the applications for trade marks and designs received and registered during the years 1932 to 1936:—

TRADE MARKS AND DESIGNS, AUSTRALIA.—SUMMARY.

Applications.			1932.	1933	1934.	1935.	1936.
RECEIVED							
Trade Marks	..	..	1,976	1,905	2,087	2,071	2,215
Designs	..	..	409	646	1,670	2,319	1,494
REGISTERED.							
Trade Marks	..	..	1,273	1,316	1,268	1,349	1,664
Designs	..	..	470	497	1,465	2,085	1,546

(iv) *Revenue.* The revenue of the Trade Marks and Designs Office during the years 1932 to 1936 is given hereunder:—

TRADE MARKS AND DESIGNS, AUSTRALIA.—REVENUE.

Particulars.	1932.			1933.			1934.			1935.			1936.		
	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.	Trade Marks.	Designs.	Publications.
Fees collected under Commonwealth Acts ..	£ 11,596	£ 750	£ 21	£ 12,720	£ 814	£ 13	£ 20,469	£ 1,052	£ 17	£ 15,580	£ 1,053	£ 13	£ 16,434	£ 1,110	£ 19

No fees in respect of Trade Marks have been collected under State Acts since the year 1922.

§ 2. Copyright.

1. *Legislation.*—Copyright is regulated by the Commonwealth Copyright Act 1912-1935 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The

Commonwealth Government promulgated a further Order in Council which came into operation on the 1st February, 1923, and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

2. **Applications and Registrations.**—The following table shows under the various headings the number of applications for copyright received and registered, and the total revenue obtained for the years 1932 to 1936 :—

COPYRIGHT, AUSTRALIA.—SUMMARY.

Particulars.	1932.	1933.	1934.	1935.	1936.
Applications received—					
Literary	1,469	1,463	1,611	1,408	1,463
Artistic	91	90	108	78	86
International	1	2	3	2	3
Applications registered—					
Literary	1,381	1,350	1,514	1,346	1,389
Artistic	74	72	91	69	78
International .. ..	..	..	..	..	1
Revenue £	405	382	433	378	388

§ 3. Local Option and Reduction of Licences.

Local option concerning the sale of fermented and spirituous liquors is in force in the States of South Australia and Tasmania. In Victoria, Queensland and Western Australia State wide polls have superseded the local polls, while in New South Wales the taking of local option polls has been suspended since 1913, though a special State wide referendum was taken in 1928 on the question of State wide prohibition with compensation.

In all States other than South Australia a maximum number is established above which licences shall not be increased except under certain specified conditions (the principal case being the greater demand for service of a considerably increased population). Licences Reduction Boards are in operation in New South Wales and Victoria and in all other States machinery exists for the reduction of licences where it seems desirable or where there is a local option vote in favour of the reduction of licences.

In earlier issues of the Year Book (*see* No. 22, pp. 1005-1008), details, by States, were published of polls taken and of the operations of the Licences Reduction Boards.

§ 4. Lord Howe Island.

Lord Howe Island is situated in latitude 31° 30' south, longitude 159° 5' east, about 130 miles north-east of Sydney, and has an area of 3,220 acres. The climate is mild and the rainfall abundant, but on account of the rocky formation of its surface only about 300 acres are suitable for cultivation, most of which are devoted to the production of Kentia Palm Seed. The land belongs to the Crown and is occupied rent-free on sufferance.

Discovered in 1788 the Island was first settled by a small party of Maoris in 1853; afterwards a colony was settled from Sydney. Constitutionally the Island is a dependency of New South Wales and is included in King, one of the electorates of Sydney. A Board of Control at Sydney manages the affairs of the Island and supervises the palm seed industry. At the Census of 30th June, 1933, the population was 161.

§ 5. Commonwealth Council for Scientific and Industrial Research.

1. **General.**—By the Science and Industry Research Act 1920-26, the previously existing Commonwealth Institute of Science and Industry was reorganized under the title of the Council for Scientific and Industrial Research. An account of the organization and work of the former Institute was given in earlier issues of the Official Year Book. (*See No. 18, p. 1062.*)

2. **Science and Industry Research Act 1920-26.**—This Act provides for a Council, consisting of—

- (a) Three members nominated by the Commonwealth Government.
- (b) The Chairman of each State Committee constituted under the Act.
- (c) Such other members as the Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The three Commonwealth nominees form an Executive Committee which may exercise, between meetings of the Council, all the powers and functions of the Council, of which the principal are as follows:—(a) To initiate and carry out scientific researches in connexion with primary or secondary industries in the Commonwealth; (b) to train research workers and to establish industrial research studentships and fellowships; (c) to make grants in aid of pure scientific research; (d) to establish industrial research associations in any industries; (e) to test and standardize scientific apparatus and instruments; (f) to establish a Bureau of Information; and (g) to act as a means of liaison between the Commonwealth and other countries in matters of scientific research.

State Committees, whose main function is to advise the Council as to matters that may affect their respective States, have been constituted in accordance with prescribed regulations.

3. **Science and Industry Endowment Act 1926.**—Under this Act, the Government has established a fund of £100,000, the income from which is to be used to provide assistance (a) to persons engaged in scientific research, and (b) in the training of students in scientific research. Provision is made for gifts or bequests to be made to the fund, which is controlled by a trust consisting of the three Commonwealth nominees on the Council. In accordance with the Act, arrangements have been made to send a number of qualified graduates abroad for training in special fields of work.

4. **Work of the Council.**—The full Council held its first meeting in June, 1926, and thereafter at about half-yearly intervals. It has adopted a policy of placing each of its major fields of related researches under the direction of an officer having a standing at least as high as, if not higher than, that of a University Professor.

The main branches of work of the Council at present are (i) plant problems, (ii) soil problems, (iii) entomological problems, (iv) animal health and nutrition problems, (v) forest products, (vi) food preservation and transport, (vii) radio research, (viii) ore-dressing (gold) and mineragraphic investigations, and (ix) fisheries investigations. Successful results have been obtained in a number of directions, particularly in regard to bitter pit in apples, spotted wilt in tomatoes, water blister of pineapples, blue mould of tobacco, the cultivation and drying of vine fruits, the cultivation of citrus fruits, contagious pleuro-pneumonia of cattle, the feeding of sheep for increased wool production, black disease, infectious enterotoxæmia, pulpy kidney and caseous lymphadenitis of sheep, internal parasites, coast disease of sheep, soil surveys, paper making from Australian timbers, timber seasoning and preservation, and the preservation and transport of bananas, oranges, chilled beef and other food-stuffs. More detailed information concerning the work of the Council may be found in Year Book No. 22, pp. 1009 and 1010.

§ 6. Australian Institute of Anatomy.

1. *Foundation of Institute.*—The Australian Institute of Anatomy, situated in Canberra, occupies a monumental building erected by the Federal Government under the Zoological Museum Agreement Act of 1924. Prior to the passing of this Act, the Federal Government had expressed regret that the Australian Nation possessed neither a collection of specimens of the unique and fast disappearing fauna of Australia, nor a Museum in which such specimens could be preserved for future generations. Comparative anatomy is the basis of medical science, and while the importance of a study of Australian animals in the solution of various medical problems had for years been recognized by other countries and steps taken by them to procure specimens for their museums, national effort in this direction was neglected in Australia. Sir Colin MacKenzie, the first Director of the Institute of Anatomy, however, very kindly presented to the Federal Government his entire private collection, and this magnificent gift was acquired and provision was made for its proper housing under special legislation by the Federal Government.

2. *Additions to Original Collection.*—In addition to the original collection, which has been greatly augmented, the following free gifts have been made to the Australian Nation, and are on view in the Institute :—

- (1) *Horne-Bowie Collection.*—Dealing with the life of Central Australian aborigines, and throwing valuable light on the psychology of this Stone Age people.
- (2) *Burrell Collection.*—This deals with the life history of the platypus, and is unique in the world. The platypus is the most primitive mammal known to science, and is the link between the bird, the reptile and the mammal.
- (3) *Milne Collection.*—This is an anthropological and ethnological collection dealing with the aborigines of New South Wales, and contains many valuable and now unobtainable native weapons and implements.
- (4) *Murray Black Collection* of anatomical material representative of the aborigines of Southern Victoria and the River Murray.
- (5) *Nankivell Collection*, illustrating the anatomy of the aborigines of the Murray Valley.
- (6) *Harvard University Collection.*—This includes a collection of specimens from the Harvard University, U.S.A., representing a carefully worked out epitome of archaeology of the United States, and, together with two rare skeletons of primitive North American Indians, was a goodwill gift from the University to the Institute of Anatomy.
- (7) *The Sir Hubert Murray Collection.*—The ethnological and osteological collection of Sir Hubert Murray, Lieutenant-Governor of Papua. This deals especially with the anthropology of Papua.
- (8) *The Rabaul Ethnological Collection.*—This concerns chiefly the Ethnology of the Mandated Territory of New Guinea.
- (9) *The Basedow Collection.*—This collection has been recently purchased by the Commonwealth Government. It deals especially with the anthropology of Central and Northern Australia and was assembled, after many years of research, by the late Dr. Herbert Basedow of Adelaide who was formerly Protector of Aborigines.
- (10) Many hundreds of specimens and books received from numerous interested scientists, the most outstanding being those from Mr. E. Hill, of Nagambie, Victoria; Mrs. Harry Burrell, New South Wales; and medical books for the Library from the estates of the late Drs. Molloy, David Grant and Robert Stirling.

3. **Endowments for Orations and Lectures.**—In addition to the aforementioned donations of material, there have been several endowments for Orations and Lectures as follows :—

- (1) *The Halford Oration.*—Endowed with a gift of £1,000 by the family of the late Professor G. B. Halford, founder of the first medical school in the Southern Hemisphere. The interest on this amount is given to a prominent scientist to deliver an oration on a subject suggested by the life and work of the late G. B. Halford.
- (2) *The Anne MacKenzie Oration.*—Founded with a gift of £1,000 by Sir Colin MacKenzie, in memory of his mother. The orator receives the annual interest for delivering an oration on any phase of "Preventive Medicine".
- (3) *The Dr. G. E. Morrison Memorial Lecture on Ethnology.*—Founded by Chinese residents in Australia, in memory of a great Australian who rendered important services to China.
- (4) *The Kendall Lecture in Veterinary Science.*—Endowed by the sons of the late Dr. W. T. Kendall, who was the founder of the first Veterinary School in the Southern Hemisphere.
- (5) *The Charles Mackay Lecture on Medical History.*—Endowed by Miss C. MacKenzie with a gift of £607 as a memorial to her grandfather, an educationalist, who arrived in Melbourne in 1852 and died at Kilmore, Victoria.
- (6) *The Cilento Medal.*—This bronze medal has been endowed in perpetuity by Sir Raphael Cilento, Director-General of Health for Queensland, to be awarded annually to the scientist deemed to have accomplished the best practical work for the furtherance of Tropical Hygiene and Native Welfare in Australia.

4. **Ultimate Scope of the Institute.**—The Institute of Anatomy may be regarded as the first unit of a National University of Australia, and has already become the most important centre in the Southern Hemisphere for the study of comparative anatomy and of its application to human health and disease. Research work in many branches of this subject is being carried out, and an extensive collection of material for the use of future generations is being catalogued. The microscopic specimens of Australian fauna number many thousands, and are unique in the world. They represent normal mammalian tissues unaffected by disease or domestication, and with these, human tissues such as those affected with cancer can be compared. The building is used to a large extent for educational purposes. From 1931 to 1935 all the University College lectures were given there. Public lectures of an educational nature are delivered in the lecture theatre, and many conferences dealing with Commonwealth health problems are held in the Institute building. The general public is admitted to the two great Museums of Osteology and Applied Anatomy, and large numbers take advantage of this concession.

§ 7. The Commonwealth Solar Observatory.

1. **Reasons for Foundation.**—The Commonwealth Solar Observatory was established for the study of solar phenomena, for allied stellar and spectroscopic research, and for the investigation of associated terrestrial phenomena. It is so situated to complete the chain of existing astrophysical observatories round the globe separated by 90 degrees of longitude. In addition to advancing the knowledge of the universe and the mode of its development, it is hoped that the eventual discovery of the true relation between solar and terrestrial phenomena may lead to results which will prove of direct value to the country.

2. **History of Inauguration.**—A short account of the steps leading up to the establishment of the Observatory will be found in Official Year Book No. 19, p. 979.

3. **Site of the Observatory.**—The site selected for the Observatory is on Mount Stromlo, a ridge of hills about 7 miles west of Canberra. The highest point is 2,500 feet above sea level, or about 700 feet above the general level of the Federal Capital City.

4. **Equipment.**—The bulk of the telescopic equipment is due to the generosity of supporters of the movement in England and Australia. The gifts include a 6-in. Grubb refracting telescope presented by the late W. E. Wilson, F.R.S., and Sir Howard Grubb, F.R.S., trustees of the late Lord Farnham : a 9-in. Grubb refractor with a 6-in. Dallmeyer lens presented by the late Mr. James Oddie, of Ballarat ; while Mr. J. H. Reynolds of Birmingham presented a large reflecting telescope with a mirror 30 inches in diameter. A sun telescope including an 18-in. equiset has been installed, and further additions include a spectroheliograph, cosmic ray apparatus, radio research equipment and spectroscopes for the examination of spectra in the infra-red, violet and ultra-violet regions. Donations amounting to over £2,500 have been received, and form the nucleus of a Foundation and Endowment Fund.

5. **Observational Work.**—The observational work embraces the following:—(a) solar research ; (b) stellar research ; (c) spectroscopic researches ; (d) atmospheric electricity ; (e) cosmic radiation ; (f) radio research ; (g) ozone content of the atmosphere ; (h) luminosity of the night sky ; and (i) meteorological observations. A more detailed account of the observational work cannot, owing to limits of space, be published in this issue, but may be found in earlier issues (see No. 22, p. 1011).

§ 8. Standards Association of Australia.

This Association was established under the aegis of the Commonwealth and State Governments for the promotion of standardization and simplified practice.

In addition to the Council and Standing and Organization Committees, the following Sectional Committees have been appointed to formulate Australian standard specifications and codes:—A.—*Safety Codes Group*—(1) Boiler Regulations (including Gas Cylinders) ; (2) Concrete and Reinforced Concrete Structures ; (3) Cranes and Hoists ; (4) Electrical Wiring Rules ; (5) Lift Installations ; (6) Pump Tests ; (7) Refrigeration ; (8) Steel Frame Structures ; (9) Welding ; (10) Fireproof Construction ; (11) Building By-laws ; (12) Electrical Service Rules ; (13) Handling and Use of Explosives ; (14) Air-lock Operation ; (15) Street Lighting ; (16) X-ray Installations. B.—*General Technical Standard Group*—(1) Bore Casing ; (2) Building Materials ; (3) Calcium Carbide ; (4) Cement ; (5) Coal—Sampling and Analysis ; (6) Colliery Equipment ; (7) Provisional Electrical Approval Standards ; (8) Electrical ; (9) Firebricks ; (10) Locomotive and Railway Rolling-stock ; (11) Lubricants ; (12) Machine Belting ; (13) Machine Parts ; (14) Non-ferrous Metals ; (15) Paint and Varnish ; (16) Pipes and Plumbing ; (17) Railway Permanent Way Materials ; (18) Roadmaking Materials ; (19) Structural Steel ; (20) Testing, Weighing and Gauging ; (21) Timber ; (22) Tramway Rails ; (23) Typography ; (24) Galvanizing and Galvanized Products ; (25) Roadmaking Machinery ; (26) Sugar Mill Machinery ; (27) Creosote ; (28) Safety Glass for Automobiles. C.—*Co-ordinating Committees*—(1) Concrete Products ; (2) Ferrous Metals ; (3) Non-ferrous Metals. D.—*Commercial Standards Division Committees*—(1) Building Materials Classification ; (2) Three-ply Wood Panels for Use in Stock Door Manufacture ; (3) Institutional Supplies and Co-ordinated Purchasing (Hospitals, Asylums and other Public Institutions) ; (4) General Conditions of Contract ; (5) Purified Feathers ; (6) Commercial Paper Sizes ; (7) Road Gully Gratings ; (8) Street Name Plates and Building Number Plates ; (9) Sheet Metal Guttering, Ridging and Downpiping ; (10) Laminated Steel Springs for Motor Cars ; (11) Shellgrit for Poultry ; (12) Road Signs and Traffic Signals.

A Power Survey Committee to deal with the collection of data and the framing of recommendations for assistance in the development and co-ordination of power schemes has also been appointed.

The association administers the Australian National Committees of the International Electro-technical Commission, the World Power Conference and the International Commission on Large Dams.

The objects of the Association include the following :—To prepare and promote the general adoption of standards in connexion with structures, materials, etc.; to co-ordinate the efforts of producers and users for the improvement of materials, processes and methods; and to procure the recognition of the Association in any foreign country.

The sole executive authority of the Association is vested in the Council, which undertakes the whole of the organization of the movement, the raising of the necessary funds, the controlling of the expenditure, the arranging of the subjects to be dealt with by the various sectional and sub-committees, and the authority for the issue of all the reports and specifications.

The Association was established in July, 1929, by amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Commonwealth Association of Simplified Practice.

§ 9. Valuation of Australian Production.

1. *Value of Production.*—(i) *Net Values.* The annual value of production was defined by the Conference of Statisticians in 1924 as the sum available each year for distribution among those concerned in industry, i.e., workers, proprietors (including landlords) and providers of capital. In the past the want of complete uniformity in the methods of compilation and presentation of statistics of recorded production rendered it very difficult to make a satisfactory valuation of the various elements of production in accordance with the above definition. At the conference of 1924 and those subsequently held a uniform method of determining the gross value, marketing costs and production costs was laid down. This arrangement enabled the State Statisticians to compile the various elements of costs on a uniform basis which permitted the aggregation of the figures for each State to obtain a total for Australia.

The figures shown in the following table have been compiled by the Statisticians of the several States and, to a large extent, are based upon actual records. Where these have not been possible careful estimates have been made from the best available data. Absolute uniformity has not been attained in every detail but the few remaining differences of procedure are of little importance. This matter is referred to in the note at the head of the table.

Attention is directed to the fact that the value shown in the table refers only to recorded production and excludes the building and construction industry, those industrial establishments not classified as factories, and agricultural and farmyard produce grown on areas of less than one acre.

The following is a brief explanation of the terms used in the table :—

- (a) "Gross value" is the value placed on gross production at the wholesale price realized in the principal markets. (In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.)
- (b) "Local value" is the gross production valued at the place of production and is ascertained by deducting marketing costs from the gross value. (Marketing costs include freight, cost of containers, commission and other charges incidental thereto.)
- (c) "Net value" represents the net return to the producer after deducting from the gross value costs of marketing and of materials used in the process of production. Materials used in the process of production include seed, fodder consumed by farm stock, manures, dips, sprays and other costs. No deduction has been made for depreciation and maintenance costs. This matter is more fully dealt with in the Production Bulletin, No. 30, issued by this Bureau.

The value of materials used in the process of primary production for New South Wales does not include the cost of power. In Queensland the costs for the pastoral industry are not as exact as might be desired, but it is hoped to bring them into line in the immediate future. The value shown for Mines and Quarries in Tasmania

is understated owing to the omission of Quarries. As explained in the note (a) below production costs are not available for all States in respect of Fisheries, Mines and Quarries, and Local Values have been used for these industries with consequent overstatement.

GROSS, LOCAL AND NET VALUE OF RECORDED PRODUCTION—AUSTRALIA, 1935-36.

Industry.	Gross Production valued at Principal Markets.	Local Value—Gross Production valued at place of Production.	Net Value of Production (without deduction of depreciation or maintenance.)
	£	£	£
Agriculture	75,102,654	63,537,022	48,438,993
Pastoral	83,224,102	75,717,119	73,227,732
Dairying	34,678,738	32,367,126	20,847,884
Poultry and Bees ..	9,810,136	8,918,038	5,867,781
Total Rural (c) ..	202,815,630	180,539,305	154,382,390
Trapping	3,134,776	2,793,146	2,793,146
Forestry	7,641,162	6,834,038	6,807,596
Fisheries	1,743,694	1,452,060	(a) 1,452,060
Mines and Quarries ..	22,554,048	22,089,402	(a) 22,089,402
Total Non-rural ..	35,073,680	33,169,242	33,142,204
Total All Primary ..	237,889,310	213,708,551	187,524,594
Factories	(b) 162,437,464	(b) 162,437,464	162,437,464
Total All Industries ..	400,326,774	376,146,015	349,962,058

(a) Local value. Production costs not available for all States. (b) Net value. (c) The term "Rural" is used to cover those industries ordinarily considered to be farm industries.

The net value of production in each State is shown hereunder :—

NET (a) VALUE OF RECORDED PRODUCTION IN STATES, 1935-36.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Agriculture	13,285	11,717	9,690	7,337	4,078	1,723	48,439
Pastoral	32,799	17,122	11,561	4,603	5,350	1,493	73,228
Dairying	9,195	9,345	5,809	1,303	505	541	20,848
Poultry and Bees ..	2,271	2,411	305	288	283	309	5,867
Total Rural (net) ..	57,550	40,895	27,434	13,521	10,816	4,066	154,382
Trapping	1,568	808	56	67	111	184	2,794
Forestry	2,014	692	2,070	526	1,130	364	6,808
Fisheries (local) ..	582	117	287	183	179	71	1,452
Mines and Quarries (local) ..	8,015	1,794	2,130	2,556	6,193	1,071	22,089
Total Non-rural (local and net) ..	12,210	3,441	4,849	3,334	7,619	1,690	33,143
Total All Primary ..	69,760	44,336	32,283	16,955	18,435	5,756	187,525
Factories	69,470	54,043	15,083	11,670	7,504	4,007	162,437
Total All Industries ..	139,230	98,379	47,966	28,625	25,939	9,823	349,962

(a) See letterpress at head of previous Table.

NET (a) VALUE OF RECORDED PRODUCTION PER HEAD OF MEAN POPULATION.

Industry.	New South Wales.	Victoria.	Q'land.	South Australia.	Western Australia.	Tasmania.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Agriculture	5 0 0	6 7 2	9 19 0	12 10 4	10 8 11	7 9 8	7 3 0
Pastoral	12 6 11	9 9 0	11 17 10	7 17 0	11 18 11	6 9 7	10 16 11
Dairying	3 9 3	5 1 5	6 0 9	2 7 6	1 2 7	2 0 11	3 19 0
Poultry and Bees ..	0 17 2	1 6 2	0 6 3	0 9 10	0 12 7	1 0 11	0 17 5
Total Rural (net) ..	21 13 4	22 3 9	28 4 4	23 4 8	24 3 0	17 13 1	22 17 4
Trapping	0 11 10	0 8 7	0 1 2	0 2 3	0 1 11	0 10 0	0 8 3
Forestry	0 15 2	0 7 0	2 2 0	0 17 11	2 10 9	1 11 7	1 0 2
Fisheries (local) ..	0 4 5	0 1 7	0 5 11	0 6 4	0 8 0	0 6 2	0 4 4
Mining (local)	3 0 6	0 19 6	2 10 0	4 7 3	13 16 7	4 13 1	3 5 5
Total Non-rural (local and net) ..	4 11 11	1 17 4	4 19 9	5 13 9	17 0 3	7 6 10	4 18 2
Total All Primary (local and net) ..	26 5 3	24 1 1	33 4 1	28 18 5	41 3 3	24 19 11	27 15 6
Factories	26 3 0	29 6 5	10 2 8	19 18 2	16 15 1	17 13 2	24 1 3
Total All Industries	52 8 3	53 7 6	49 6 9	48 16 7	57 18 4	42 13 1	51 16 9

(a) See letterpress at head of previous Table.

(ii) *Gross Values.* The estimated gross value of production shown in the following table is a continuation of the method previously used by this Bureau. It cannot be compared with the gross values shown in the table above on account of the difference in the methods used and the change in the computing authority. It is proposed to discontinue the publication of this table once the net values have been satisfactorily established.

ESTIMATED GROSS VALUE OF PRODUCTION.—AUSTRALIA.

Year.	Agriculture.	Pastoral.	Dairy, Poultry, and Bee-farming.	Forestry.	Fisheries.	Mining.	Manufacturing.(a)	Total.
	£1,000.	£1,000.	£1,000.	£1,000.	£1,000.	£1,000.	£1,000.	£1,000.
1924-25	107,163	127,301	45,190	10,577	1,780	24,592	137,977	454,560
1925-26	89,267	113,556	48,278	10,964	1,820	24,529	143,256	431,670
1926-27	98,295	111,716	46,980	11,046	1,744	23,939	153,634	447,354
1927-28	84,328	124,554	50,261	10,339	1,842	23,015	158,562	452,901
1928-29	89,440	116,733	50,717	9,449	2,168	19,539	159,759	447,805
1929-30	77,109	84,563	49,398	9,103	2,268	17,912	149,184	389,537
1930-31	70,500	69,499	43,067	6,488	1,825	15,361	112,966	319,706
1931-32	74,489	61,540	41,478	6,033	1,670	13,352	106,456	305,018
1932-33	75,502	64,851	39,622	6,791	1,670	15,583	114,130	316,224
1933-34	70,731	95,613	40,306	7,985	1,620	17,608	123,355	357,218
1934-35	68,587	74,556	44,763	9,221	1,635	10,949	137,038	356,349
1935-36	75,388	91,286	47,533	9,937	1,687	23,248	155,891	404,970

(a) *Net Values.* These amounts differ from those given in the two previous tables and in Chapter XXIV., Manufacturing Industry, which include certain products included under Dairy Farming and Forestry in this table.

2. *Productive Activity*.—In previous issues an attempt was made to measure the quantity of material production by means of production price index-numbers. It was found, however, that these were not satisfactory in their application to factory production. In the absence of a satisfactory measure of the *quantity* of production, the retail price index-numbers have been applied to the value of production, in the same manner as they have been applied to nominal wages, to measure their relative purchasing power. The results may be taken to indicate the purchasing power in retail prices of the things produced, and for convenience will hereafter be called *real* production.

Two tables are given:—The first shows *real* production per head of population, but any deductions therefrom must take into account the following considerations. The production considered is material production only, and takes no account of services. As civilization advances, material production becomes less important relatively to services, and a smaller proportion of the population is engaged in such production. For example, the use of the motor car, the cinema and wireless is comparatively recent, and these employ a much larger number of people in services than in material production. Hence material production per head of population will not measure accurately the progress of productive efficiency, but will tend to give too low a value. Unemployment, of course, will also depress it.

A better measure is afforded by *real* production per person engaged in material production. The second table attempts to give this. The result affords a better measure of productive efficiency, but does not take into account the effect of unemployment, though the index may be somewhat depressed by short time and rationing.

The two tables tell different stories. Before unemployment became severe in 1930 *real* production per head (as shown in the last two columns of the first table) had remained substantially steady with minor fluctuations since 1900. Whatever gain had been made in productive efficiency had been off-set by the gradual transfer of labour from production of goods to production of services. Coincident with the heavy increase in unemployment between the years 1930 and 1933, the maximum being reached in 1932, the index-numbers fell sharply from their normal level of about 100 to 76 ("A" Series) and 78 ("C" Series) in 1930-31. This would imply a fall in average *real* income of nearly one-fourth from the normal level, taking unemployment into account. During the following three years the index-numbers rose to 90 and 97, equivalent to an increase in *real* production of 25 per cent. In 1934-35, however, the index-numbers fell slightly, due principally to the retail price index-numbers rising while the value of production showed little change. In 1935-36 they more than recovered the lost ground, the rise in prices being insufficient to offset the very substantial improvement in the recorded value of production per head. The index-numbers of 101 ("A" Series) and 105 ("C" Series) are greater than those for 1928-29 and practically equal to those for 1926-27.

The index-numbers of *real* production per person engaged as given in the last two columns of the second table show, on the other hand, an appreciable upward tendency. They rose steeply during the war, as might have been expected, fell somewhat after the war and recovered again. In 1929-30 they fell substantially, due partly to the lag in the fall of retail prices. They increased during the next four years to 125 and 126 only to fall again in 1934-35 to 115 and 117 with the fall in wool prices during that year. In 1935-36 they recovered most of this loss, and, at 121 and 125, stood above the levels of 1928-29. This high figure for *real* production per person engaged implies a high *real* wage for those in employment and is consistent with available information concerning rates of *effective* or *real* wages, which more than maintained in recent years the high level reached in the years 1927 to 1929.

The data for the second table are not complete. The numbers engaged in timber-getting are not accurately known, so that the value of production on this account, and the corresponding persons engaged, are both left out of account. Further, the information concerning women engaged in primary production is unsatisfactory, and only males are counted in primary industries. In manufacturing, the numbers are converted into equivalent male workers on the basis of relative wages for male and female workers. The column headed "numbers engaged" is, therefore, rather an index than the absolute number of individuals occupied in material production, but, as an index, it should be accurate enough to give a satisfactory measure of production per person engaged.

PRODUCTION PER HEAD OF POPULATION.—AUSTRALIA.

Year.	Gross Value of Material Production.			Retail Price Index-numbers. (a) 1911 = 1,000.		Real Production per head of population (1911 = 100) measured in purchasing power over regimen of—	
	Total.	Per head of population.				"A" Series.	"C" Series.
		Actual.	Index- Number. 1911 = 100.	"A" Series.	"C" Series.		
	£1,000.	£					
1906 ..	147,043	35.9	87	902	..	97	..
1911 ..	188,359	41.2	100	1,000	(1,000)	100	100
1913 ..	220,884	45.1	110	1,104	..	99	..
1914 ..	213,552	43.0	104	1,140	1,140	92	92
1916 ..	261,996	53.3	129	1,324	1,319	98	98
1917 ..	279,418	56.1	136	1,318	1,406	103	97
1918 ..	291,875	57.5	140	1,362	1,501	102	93
1919-20 ..	343,697	64.9	158	1,624	1,695	97	93
1920-21 ..	390,644	72.2	175	1,821	1,935	96	91
1921-22 ..	344,426	62.5	152	1,600	1,680	95	90
1922-23 ..	379,445	67.4	163	1,642	1,619	100	101
1923-24 ..	400,276	69.6	169	1,714	1,664	99	102
1924-25 ..	454,580	77.3	188	1,690	1,637	111	115
1925-26 ..	431,670	72.0	175	1,766	1,673	99	104
1926-27 ..	447,354	73.1	178	1,763	1,663	101	107
1927-28 ..	452,901	72.5	176	1,776	1,676	99	105
1928-29 ..	447,805	70.5	171	1,785	1,603	96	101
1929-30 ..	389,537	60.6	147	1,783	1,688	83	87
1930-31 ..	319,706	49.2	120	1,574	1,528	76	78
1931-32 ..	305,018	46.5	113	1,432	1,406	79	80
1932-33 ..	318,224	48.2	117	1,358	1,344	86	87
1933-34 ..	357,218	53.7	130	1,305	1,344	96	97
1934-35 ..	356,349	53.2	129	1,399	1,366	92	95
1935-36 ..	404,970	60.0	146	1,437	1,392	101	105

(a) For explanation of "A" and "C" Series see Chapter XVII.

PRODUCTION PER PERSON ENGAGED.—AUSTRALIA.

Year.	Number engaged in Material Production. (a)	Value of Material Production per person engaged in production. (a)		"Real" Production per person engaged (1911 = 100) measured in retail purchasing power over regimen of—(b)	
		Actual.	Index-number. 1911 = 100.	"A" Series.	"C" Series.
	(1,000)	£			
1906 ..	659	223	87	96	..
1911 ..	728	257	100	100	100
1913 ..	756	290	113	102	..
1914 ..	733	289	113	99	99
1916 ..	685	381	148	112	112
1917 ..	683	408	159	120	113
1918 ..	685	424	165	121	110
1919-20 ..	743	460	179	110	106
1920-21 ..	760	510	199	109	103
1921-22 ..	775	441	172	107	102
1922-23 ..	793	475	185	113	114
1923-24 ..	810	491	191	111	115
1924-25 ..	826	547	213	126	130
1925-26 ..	831	515	201	114	120
1926-27 ..	841	527	205	116	123
1927-28 ..	838	536	209	118	125
1928-29 ..	830	536	209	117	123
1929-30 ..	803	482	187	105	110
1930-31 ..	728	431	168	108	112
1931-32 ..	741	411	160	112	114
1932-33 ..	781	407	158	117	118
1933-34 ..	815	437	170	125	126
1934-35 ..	862	412	160	115	117
1935-36 ..	901	448	174	121	125

(a) See explanatory remarks above tables.

(b) See note (a) to previous table.

§ 10. Film Censorship.

1. **Legislation.**—The censorship of imported films derives its authority from section 52 (g) of the Customs Act, which gives power to prohibit the importation of goods. Under this section regulations have been issued prohibiting the importation of films and relative advertising matter except under certain conditions and with the consent of the Minister. The regulations provide, *inter alia*, that no film shall be registered which in the opinion of the censor is (a) blasphemous, indecent or obscene; (b) likely to be injurious to morality, or to encourage or incite to crime; (c) likely to be offensive to the people of any friendly nation; (d) likely to be offensive to the people of the British Empire; or (e) depicts any matter the exhibition of which is undesirable in the public interest.

The regulations governing the exportation of Australian-made films are similar, with the addition that no film may be exported which in the opinion of the Censorship is likely to prove detrimental or prejudicial to the Commonwealth of Australia.

The Censorship consists of a Censorship Board of three persons and an Appeal Censor, the headquarters being in Sydney. Importers also have the right of appeal to the Minister.

In addition to the censorship of moving pictures, the Censorship may refuse to admit into Australia any advertising matter proposed to be used in connexion with the exhibition of any film. Such control does not, however, extend to locally-produced publicity.

2. **Imports of Films.**—Imported films dealt with by the Censorship for the year 1936 were as follows:—1,518 films of 3,302,117 feet passed without eliminations, 147 films of 727,601 feet passed after eliminations, and 19 films of 119,146 feet rejected in first instance, making a total of 1,684 films of 4,238,954 feet (one copy). The countries of origin were as follows:—United States of America, 1,084 films of 3,094,474 feet; United Kingdom, 489 films of 1,010,181 feet; and 111 films of 134,299 feet from other countries.

The above figures relate to standard size films (35 millimetres). There were also imported during 1936, 1,182 miniature films (16 millimetres and 9.5 millimetres) of 438,751 feet.

3. **Exports of Films.**—The number of films exported for the year 1936 was 1,165 of 1,353,615 feet (one copy), of which 922 films of 1,170,787 feet were sent to places in the British Empire including Mandated Territories.

§ 11. Marketing of Australian Commodities.

1. **Introduction.**—Particulars in respect of the various Commonwealth Acts and Regulations together with the operations of the Boards or Councils appointed to assist or control the marketing of Australian commodities are set out below.

2. **Dairy Produce.**—(i) *The Dairy Produce Export Control Act 1924-1936.* Introduced at the request of the dairying industry this Act was passed by the Commonwealth Parliament with the object of organizing the overseas marketing of Australian dairy produce. A Dairy Produce Control Board was appointed and was in existence from 1924 to 1935. It dealt with matters relating to the organization and supervision of overseas marketing of dairy produce. In the course of its functions the Board regulated shipments to ensure regularity of supply in the London market, controlled forward selling, obtained reductions in overseas freights and insurance rates, and participated in an advertising campaign in the United Kingdom.

Prior to the appointment of the Dairy Produce Control Board a voluntary body—the Australian Dairy Council—was established to advise and make recommendations to the Governments on problems connected with the production, manufacture and quality of dairy produce, pasture improvement, and diseases of dairy cattle.

Following a recommendation by the Australian Agricultural Council the functions of these bodies were combined by an Amending Act of 1935 under the Australian Dairy Produce Board and provision was made for the allocation of money from the Board's funds for research and investigation into pastures, diseases of dairy cattle, and the quality of butter.

(ii) *The Dairy Produce Export Charges Act 1924-1929.* This Act provides for the imposition of a levy on all butter and cheese exported from the Commonwealth to cover the administrative expenses of the Board and for advertising and other purposes. The rate of the levy is fixed by regulation.

(iii) *The Dairy Produce Act 1933-1935.* In § 1 par. 3 of Chapter XXI. reference is made to the voluntary and compulsory plans introduced for the purpose of stabilizing the prices of dairy produce in Australia. Under State legislation regulating authorities fixed the proportion of the States' output to be sold within the respective States, and the Dairy Produce Act was passed by the Commonwealth Parliament to protect these "quotas" from the effects of interstate competition.

3. **Dried Fruits.**—(i) *The Dried Fruits Export Control Act 1924-1935.* This Act was passed by the Commonwealth Parliament at the request of the dried fruits industry to organize the overseas marketing of Australian dried vine fruits. The Dried Fruits Control Board, consisting of eight members—including five growers' representatives,

two members with commercial experience, and one Government nominee—was appointed to control the export, and the sale and distribution after export, of Australian sultanias, currants and lexiass. In conjunction with its London agency, the Board has improved the marketing of Australian dried-fruits overseas, and has increased the demand for the product. Its system of appraisement has resulted in more satisfactory realizations. Its methods of ensuring continuity of supply and regulating shipments and its participation in the advertising campaign of the Australian Overseas Trade Publicity Committee have benefited the industry considerably. No dried fruits may be exported excepting by means of a licence, which is issued subject to conditions recommended by the Board.

(ii) *Dried Fruits Export Charges Act 1924-1929*. This Act provides for the imposition of a levy on all sultanias, currants and lexiass exported from the Commonwealth for the purpose of defraying the administrative expenses of the Board and the cost of advertising, etc. The rate of the levy is fixed by regulation. Under an amendment made in 1927 provision was made for the exemption of sultanias, currants and lexiass from the levy upon recommendation by the Board.

(iii) *The Dried Fruits Act 1928-1935*. In previous issues of the Year Book reference has been made to the Dried Fruits Act and its provisions outlined (*see* page 894 of Official Year Book, No. 28). The legislation is on similar lines to that for dairy produce referred to in par. 2 (iii) above.

4. *Canned Fruits*.—(i) *The Canned Fruits Export Control Act 1926-1935*. This legislation was introduced at the request of canners and representative organizations of fruit growers with the object of organizing the overseas marketing of canned fruit. The original Act referred to canned apricots, peaches and pears only, but canned pineapples and canned fruit salads consisting of not less than 75 per cent. of specified fruits were subsequently brought within the scope of the Board's operations. The personnel of the Board consists of one representative each from proprietary and privately owned canneries, co-operative canneries, State controlled canneries, pineapple interests, and the Commonwealth Government. No canned fruits to which the Act applies are permitted to be exported except under a licence issued in accordance with conditions recommended by the Board. The system of marketing adopted by the Board, including the fixation of minimum selling prices overseas, the appointment of a London agency and the engaging in overseas trade publicity, has resulted in the satisfactory disposal of the annual exportable surplus of canned fruits. The distribution of canned fruits has been widened and the exporting side of the industry placed on a sounder basis through the Board's operations.

(ii) *The Canned Fruits Export Charges Act 1926-1935*. This Act provides for the imposition of a levy on the export of canned fruits to meet the administrative and other commitments of the Board. The rate of the levy is fixed by regulation from time to time. An amendment in 1929 provided for certain exemptions from payment of the levy when recommended accordingly by the Board.

5. *Wine*.—(i) *The Wine Overseas Marketing Act 1929-1936*. This Act was introduced at the request of the viticultural interests in Australia with the object of placing the overseas marketing of Australia's surplus wine on an orderly basis. The Wine Overseas Marketing Board was appointed to supervise the exports, and the sale and distribution after export of Australian wine.

The name of the Board was changed to the Australian Wine Board in 1936. No wine may be exported except by means of a licence, which is issued under conditions recommended to the Minister by the Board; these include the withholding of shipments as directed by the Board. The Board has a London agency which advises on marketing conditions. The methods of marketing adopted by the Board, including its participation in the advertising campaign of the Australian Overseas Trade Publicity Committee, have resulted in the widening of the distribution of Australian wines overseas.

(ii) *The Wine Grapes Charges Act 1929*. This Act provides for the imposition of a levy on all grapes used in the Commonwealth for the manufacture of wines or spirit. The proceeds of the levy are used to defray the administrative and other expenses of the Board, and provision is made for such exemptions from the levy as the Board may recommend.

6. *Meat.*—(i) *The Meat Export Control Act 1935-1936.* This Act was introduced following a decision of a conference of Commonwealth and State Ministers with members of the Commonwealth Meat Advisory Committee, held in October, 1935, to set up a Meat Board with defined statutory powers. The Australian Meat Board, which was appointed under the Act in January, 1936, consists of eighteen members, representative of producers, processors, exporters and the Commonwealth Government. Provision is made for the appointment from within the Board of an Executive Committee and a Beef Committee. Export of meat is controlled by licence. The Board has power to regulate shipments of meat and to arrange contracts in respect of freights and insurances; to promote overseas sales by advertising and to foster research into meat problems; and to supervise the issue of export licences. The Board also has power to appoint a London representative.

(ii) *The Meat Export Charges Act 1935.* By means of a levy collected on all meats exported from the Commonwealth, funds are provided for the purpose of defraying the expenses and charges incurred by the Australian Meat Board in the course of its business. The customary provision is made for exemption from the levy when recommended by the Board.

7. *Export Guarantee Act.*—For a considerable time this Act has not been invoked to directly provide for assistance in the marketing of primary products. The Dried Fruits Advances Act, disbursements under which were made from the appropriation pursuant to the Export Guarantee Act, has ceased to operate. The Board of Trade, which was formed to advise and recommend on expenditure proposed under the Act, has not functioned for some years. The only recent expenditure under the Act has been in respect of special overseas trade publicity, but since 1st July, 1934, expenditure under that heading has been made the subject of a separate appropriation. The total assistance granted under the Act during its period of operation amounted to £670,574 which included substantial payments on account of both the Dried Fruits Advances Act and overseas trade publicity. Although the Export Guarantee Act has not been repealed, it is not proposed that any further payments shall be made under it.

8. *Australian Agricultural Council.*—Particulars of the formation, personnel and functions of the Australian Agricultural Council are given in Chapter XX.—Agricultural Production.

§ 12. The National Safety Council of Australia.

The National Safety Council of Australia was founded in Melbourne in 1927 for the purpose of developing mainly by means of education safety on the road, at work and in the home, and its activities have developed in other directions wherever the need for reducing the toll of accidents has been shown. In the States of New South Wales, Victoria, Queensland, South Australia and Tasmania, it issues by courtesy of the Traffic Authorities a thirty-two page booklet with every motor driver's licence, and conducts continuous propaganda through the press and other sources. It also forms Junior Safety Councils in the schools for developing a safety conscience among children. The children themselves are officers of these Councils and patrol the roads in the neighbourhood of the schools and conduct the scholars across in safety. Posters are available to schools at cost in connexion with Health and Safety lessons in the schools. Small films specially taken are available for children's and home safety instruction.

A "Safe Driving" campaign for individual motor drivers is conducted as well as a "Freedom from Accidents" competition among employee drivers, those completing a year free from any accident for which they are responsible being given a certificate to that effect. A Factories' Service of four posters per month, together with slips for pay envelopes, constitutes a regular service for the dissemination of safety advice, and was supplied to over 40,000 workers in factories last year. Committees deal with specific problems regarding traffic, films, safety in industry, air safety and home dangers. The Air Safety Committee has issued a thirty-two page booklet "Air Sense" for distribution with "A" pilots' licences through the Civil Aviation Branch of the Defence Department.

The Council is supported by public subscription and sales of service, and is a non-profit organization. Numerous lectures are given throughout the year on the work of the Council, and on various aspects of safety, and lecturers are always available for any organization which makes application to the Secretary.

§ 13. League of Nations.

Australia was one of the original signatories of the Treaty of Versailles of 28th June, 1919, under which the League of Nations was established, and thus became a Member of the League and its kindred organizations—the International Labour Organization and later the Permanent Court of International Justice. On 2nd October, 1933, Australia was elected a non-permanent member of the Council of the League of Nations for a period of three years, and was succeeded by New Zealand in September, 1936. There are now four permanent members of the Council (Great Britain, France, Italy and the Union of Soviet Socialist Republics) and eleven non-permanent members, viz., Belgium, Bolivia, China, Ecuador, Iran, Latvia, New Zealand, Peru, Poland, Rumania, and Sweden. The term of the non-permanent members is three years.

Australia has been represented at each Assembly of the League from its inauguration in 1920, and at nearly all of the conferences of the International Labour Organization. The contribution of Australia towards defraying the expenditure of the League of Nations and its kindred organizations is on the basis of 23 of 923 units, and for the year 1937 amounts to 749,874 Swiss francs, or, in Australian currency at the present rate of exchange, approximately £44,000, out of a total budget of 30,092,783 Swiss francs. Australia holds a mandate, issued through the League of Nations, for the former German territory of New Guinea, and, by agreement with Great Britain and New Zealand, administers the Mandated Territory of Nauru, for which a mandate was issued to the British Empire.

§ 14. War Service Homes.

The operations of the War Service Homes Commission at 30th June, 1937, may be briefly set out as follows:—Total applications approved, 42,979; expenditure on provision of homes, purchase of land for future use, etc., £29,378,729; 21,268 houses had been completed; and 34 homes had been enlarged.

In addition, the Commission had purchased on behalf of eligible applicants, 12,955 already existing properties, and had taken over mortgages existing on 2,843 dwelling houses. Dual assistance had been approved in respect of 59 applications, making the total number of homes provided under the War Service Homes Act, 37,159. Homes are insured under a comprehensive policy, the total insurances in force including cover notes amounting to £21,036,129. The total receipts of the Commission to 30th June, 1937, were £23,781,773, of which £8,683,213 was paid to the National Debt Sinking Fund. The percentage of arrears of instalments due was 4.22, while the total instalments due amounted to £20,476,289, and arrears to £865,499.

CHAPTER XXIX.

STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

§ 1. General.

Development of Australian Statistics.—(i) *General.* An outline of the history and development of statistics in Australia was published in Year Book No. 19 (*see* p. 988) and previous issues, particular reference being made to the Crown Colony Blue Books, Statistical Registers, Prominent State Statisticians, Statistical Conferences, the Foundation of the Federal Bureau, and Uniformity of Statistical Control. It is not proposed to repeat this information in this issue.

(ii) *Present Organization.* The organization in respect of the collection, tabulation, etc., of statistical data as between the State and Federal Statistical Bureaux, and State and Federal Government Departments, was described in Official Year Book No. 19, p. 990. Limits of space preclude its repetition in this issue.

§ 2. Statistical Publications of Australia.

1. General.—The official statistical publications of Australia may be divided bibliographically into two main divisions, namely:—(1) Commonwealth publications dealing both individually and collectively with the several States of the Commonwealth; and (2) State publications dealing with individual States only. Besides these there are many other reports, etc., issued regularly, which, though not wholly statistical, necessarily contain a considerable amount of statistical information.

2. Commonwealth Publications.—Commonwealth publications may be grouped under two heads, viz.:—(i) Publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers.

(i) *Publications issued by the Commonwealth Statistician.* The following is a list of the principal statistical publications issued from the Commonwealth Bureau of Census and Statistics since its inauguration to December, 1937:—

Australian Life Tables, 1901–1910. Australian Joint Life Tables, 1901–1910.

Australian Life Tables, 1920–1922.

Census (1911) Bulletins.

Census (1911) Results.—Vols. I., II., and III., with Appendix “Mathematical Theory of Population.”

Census (1921) Results.—Bulletins, Nos. 1 to 26. Parts I. to XVI., forming Vol. I., and Parts XVII. to XXIX., forming, with the Statistician's Report, Vol. II.

NOTE.—PART XXVII., Life Tables.

Census (1933) Results.—Bulletins, Nos. 1 to 25. Parts I. to XXVIII. For details *see* back page. Life Tables.

Finance—Bulletins, 1907 to 1916–17 annually; 1917–18 and 1918–19 (one vol.); 1919–20 and 1920–21 (one vol.); 1922–23 to 1936–37 annually.

Labour and Industrial Statistics.—Memoranda and Reports, various, to 1913.

Labour Report, annually, 1913 to 1936.

Local Government in Australia—July, 1919.

Monthly Review of Business Statistics.—First issue, October, 1937.

Official Year Book of the Commonwealth of Australia—Annually, 1907 to present issue (1937).

Oversea Trade, annually, 1906 to 1936–37.

Pocket Compendium of Australian Statistics (formerly *Statistical Digest*), 1913, 1914, 1916, and 1918 to 1937 annually.

Population and Vital Statistics Bulletins—Reports, various. Commonwealth Demography, 1911 to 1936 annually.

Production—Bulletins, annually, 1906 to 1935-36.

Professional Papers—Various. A full list will be found in *Official Year Book* No. 13, p. 3.

Quarterly Summary of Australian Statistics—first issue, No. 70, December, 1917, replacing *Monthly Summary of Australian Statistics* (Bulletins 1 to 69).

Social Insurance—Report to the Hon. the Minister of Trade and Customs, 1910.

Social Statistics—Bulletins, 1907 to 1915 annually, and 1918.

Superannuation for the Commonwealth Public Service—Report to the Hon. the Minister for Home Affairs, 1910.

Transport and Communication—Bulletins, 1906, 1908 to 1916 annually; 1919 to 1930 annually, and 1932 to 1936 annually.

Wages and Prices—January, 1932.

Wealth—The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.

Wheat Summary, Monthly.—First issue, July, 1936.

(ii) *Commonwealth Parliamentary and Departmental Reports and Papers*. Lists of the principal official reports and other documents containing statistical information issued from the inauguration of the Commonwealth were given in the *Official Year Books* up to No. 15, but limits of space preclude the incorporation of this information in the present volume.

3. *State Publications*.—The chief statistical publications of each State are set out hereunder. Limits of space preclude a further enumeration of the various *Departmental Reports*, statements of accounts, etc., issued by officials, boards, local government bodies, etc., in each State.

(a) *New South Wales*—Statistical Register (annual); *Official Year Book of New South Wales* (annual); *Statesman's (Pocket) Year Book* (annual); *Statistical Bulletin* (monthly to December, 1919, thereafter quarterly); *Monthly Summary of Business Statistics*.

(b) *Victoria*—Statistical Register (annual to 1916, then discontinued); *Victorian Year Book* (annual); *Statistical Abstracts* (quarterly to 1917).

(c) *Queensland*—Statistical Register (annual); *Official Year Book*, 1901; *A.B.C. of Queensland Statistics* (annual to 1936 then discontinued); *The Queensland Year Book* (annual, first issue 1937).

(d) *South Australia*—Statistical Register (annual); *Official Year Book*, 1912 and 1913; *Statesman's Pocket Year Book* (annual); *Quarterly Summary of Statistics*.

(e) *Western Australia*—Statistical Register (annual); *Statistical Abstracts* (quarterly, previously issued monthly to July, 1917); *Pocket Year Book of Western Australia* (annual).

(f) *Tasmania*—Statistical Register (annual); *Pocket Year Book* (annual).

§ 3. Select List of Representative Works Dealing with Australia.

(Compiled by the Librarian of the Commonwealth National Library.)

Under each heading a list is first given of the principal standard books which are still in print. This is followed by lists of selected books published during the current year and of official publications, excluding annual reports, of the same period. In the present list the period covered is 1st October, 1930, to 30th September, 1937. A few books which, though published earlier, were received after the compilation of the last issue are also included.

Technical works on Law, Medicine and the pure sciences are excluded.

The retail price in the country of publication is shown.

A copy of each of the works mentioned is preserved in the Library and access thereto may be had by any Commonwealth official or other authorized person.

The Library also publishes an annual catalogue of Australian publications, official papers and books on Australia published overseas. Copies of this are obtainable from the Librarian at a price of 2s.

General and Descriptive.

- AUSTRALIAN ENCYCLOPEDIA, THE: *editors*, A. W. Jose, H. J. Carter and T. G. Tucker. 2 vols. (Angus & Robertson, 55s.). 3rd edition, Sydney, 1926-27.
- AUSTRALIAN NATIONAL REVIEW, THE: [monthly]. (Canberra Publishing Co., 2s. *per issue*). Canberra, 1937 to date.
- BROWN, G. S. Australia: A General Account: History, Resources, Production, Social Conditions. (Nelson, 2s. 6d.). London, 1929.
- CONIGRAVE, C. P. North Australia. (Cape, 10s. 6d.). London, 1936.
- HANCOCK, W. K. Australia. (Benn, 15s.). London, 1930.
- HOPPE, E. O. The fifth continent: [Photographs] (Simpkin, Marshall, 5s.). London, 1931.
- JOSE, A. W. Australia: History and Geography. (Harrup, 10s. 6d.). London, 1931.
- MAINGAN, C. T. Central Australia. (Oxford University Press, 12s. 6d.). London, 1936.
- OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, Nos. 1 to date. (Government Printer 5s. *per issue*). Canberra, 1908 to date.
- WALKABOUT: Australia and the South Seas. (Australian National Travel Association, 12s. *per annum*). Melbourne, 1934 to date.
- WOOD, T. C. Collins: A Personal Record of a Journey from Essex, in England, to Australia. (Oxford University Press, 7s. 6d.). London, 1934.

RECENT PUBLICATIONS.

- CROLL, R. H. Wide horizons: wanderings in Central Australia. (Angus & Robertson, 9s. 6d.). Sydney, 1937.
- HILL, E. The great Australian loneliness: [travel in Northern and Central Australia]. (Jarrolds, 18s.). London, 1937.
- IDRIESS, I. L. Forty fathoms deep: pearl divers and sea rovers in Australian seas. (Angus & Robertson, 6s.). Sydney, 1937.
- TERRY, M. Sand and sun: two gold-hunting expeditions with camels in the dry lands of Central Australia. (Michael Joseph, 12s. 6d.). London, 1937.

Territories Outside Australia.

- EGGLESTON, F. W., *editor*. The Australian Mandate for New Guinea. (Melbourne University Press, 5s.). Melbourne, 1928.
- ELLS, A. F. Ocean Island and Nauru: their story. (Angus & Robertson, 7s. 6d.). Sydney, 1935.
- OFFICIAL HANDBOOK OF NEW GUINEA. (Government Printer, 5s.). Canberra, 1937.
- PACIFIC ISLANDS YEAR BOOK, THE: *ed.* by R. W. Robson. (Pacific Publications, 7s. 6d. and 9s. 6d.). Sydney, 1935. (1937/8 edition to be issued shortly.)

See also the annual reports of the Administrators of the various Territories.

RECENT PUBLICATIONS.

- BATESON, G. Naven: a survey of the problems suggested by a composite picture of the culture of a New Guinea tribe drawn from three points of view. (Cambridge University Press, 18s.). Cambridge, 1936.
- GROVES, W. C. Native education and culture-contact in New Guinea. (Melbourne University Press, 6s.). Melbourne, 1936.
- MOYNE, Lord. Walkabout: a journey in lands between the Pacific and Indian Oceans. (Heinemann, 18s.). London, 1936.
- NORTHCOTT, C. Guinea gold: the London Missionary Society at work in the Territory of Papua. (Livingston Press, 1s.). London, 1936.

History.

- CAMBRIDGE HISTORY OF THE BRITISH EMPIRE, vol. 7, pt. 1: Australia. (Cambridge University Press, 30s.). Cambridge, 1933.
- HARRIS, H. L. Australia in the making. (Angus & Robertson, 3s. 6d.). Sydney, 1936.
- HISTORICAL RECORDS OF AUSTRALIA: *editor*, J. T. Watson (*in progress*). (Commonwealth Parliament Library Committee, Canberra, 12s. 6d. *per vol.*). Sydney, 1914 to date. (34 vols. have so far appeared. Publication has been suspended since 1925.)
- MILFORD, G. D. Governor Phillip and the early settlement of New South Wales. 2nd edition. (Harbour Newspaper Co., 4s.). Sydney, 1935.
- ROBERTS, S. H. History of Australian Land Settlement, 1788-1920. (Melbourne University Press, 21s.). Melbourne, 1924.
- WOOD, G. A. The Discovery of Australia. (Macmillan, 25s.). London, 1922.

RECENT PUBLICATIONS.

- BROWN, K. S. M. Medical practice in old Parramatta: an historical review of village doctoring in the colony of New South Wales. (Angus & Robertson, 12s. 6d.). Sydney, 1937.
- CLUNE, F. P. Dig: a drama of Central Australia: [Burke and Wills Exploring Expedition]. (Angus & Robertson, 6s.). Sydney, 1937.
- HILL, E. Water into gold: [history of the Murray Valley irrigation settlements]. (Robertson & Mullens, 7s. 6d.). Melbourne, 1937.
- NEW SOUTH WALES. Public library: *Mitchell foundation*. The Mitchell Library, Sydney: historical and descriptive notes. (Public Library of New South Wales, 10s. 6d.). Sydney, 1936.
- O'BRIEN, REV. E. M. The foundation of Australia (1786-1800): a study in English criminal practice and penal colonization in the eighteenth century. (Sheed & Ward, 12s. 6d.). London, 1937.
- RHODES, F. C. Pageant of the Pacific: being the maritime history of Australasia. 2 vol. (F. J. Thwaites Pty., 42s.). Sydney, 1937.

European War, 1914-18.

- MONASH, SIR J. The Australian victories in France in 1918; 2nd edition. (Angus & Robertson 6s.). Sydney, 1936.
- NORTH, J. Gallipoli: the fading vision. (Faber, 15s.). London, 1936.
- OFFICIAL HISTORY OF AUSTRALIA IN THE WAR OF 1914-18: C. E. W. FEAR, *editor* (in progress) (Angus & Robertson, 21s. *per vol.*). Sydney, 1921 to date.
(Vols. 1-5, 7-12 have so far appeared.)

RECENT PUBLICATIONS.

- LOCK, C. B. L. The fighting 10th: a South Australian centenary souvenir of the 10th Battalion, A.I.F., 1914-19. (Author, 7s. 6d.). Adelaide, 1936.
- MCNICOL, N. G. The thirty-seventh: "History of the thirty-seventh battalion, A.I.F." (Modern Printing Co., 15s.). Melbourne, 1936.
- MITCHELL, G. D. Backs to the wall. (Angus & Robertson, 6s.). Sydney, 1937.

Biography.

- BIOGRAPHICAL HANDBOOK AND RECORD OF ELECTIONS FOR THE PARLIAMENT OF THE COMMONWEALTH, (Commonwealth Parliament Library Committee, 10s. 6d.). Canberra, 1935.
(A new issue is produced for each Federal Parliament).
- JOHNS, F. An Australian Biographical Dictionary. (Macmillan, 21s.). Melbourne, 1934.
- WHO'S WHO IN AUSTRALIA: compiled by Errol G. Knox. (Herald Press, 10s. 6d.). 9th edition. Melbourne, 1934. (New edition to appear in 1938).

RECENT PUBLICATIONS.

- RAMSDEN, E. Marsden and the missions: prelude to Waltangi. (Angus & Robertson, 12s. 6d.). Sydney, 1936.
- ROSS, L. R. M. William Lane and the Australian labor movement. (Forward Press, 7s. 6d.). Sydney, 1937.
- SMITH, Sir C. Kingsford. My flying life: an authentic biography prepared under the personal supervision of and from the diaries and papers of the late Sir Charles Kingsford Smith. (Melrose, 16s.). London, 1937.

Constitution and Administration.*

- AUSTRALIA:—*Law: Statutes.* The acts of the Parliament of the Commonwealth of Australia passed from 1901 to 1935 and in force on 1st January, 1936: to which is prefixed the Commonwealth of Australia Constitution Act. 4 vols. (Government Printer, £6 6s.). Canberra, 1936.
- AUSTRALIA:—*Royal Commission on the Constitution of the Commonwealth.* Report. (Government Printer, 16s. 9d.). Canberra, 1929.
Report of proceedings and minutes of evidence, 2 vols. (Government Printer, £3 12s.). Canberra, 1929.
- AUSTRALIAN DIGEST, THE, 1825-1933: Being a Digest of the Reported Decisions of the Australian Courts and of Australian Appeals to the Privy Council; *editors*, B. Sugerman and others: vols. 1-13. (Law Book Co., 60s. *per vol.*). Sydney, 1934 to date. (To be completed in about 20 vols.).
- KERR, D. The law of the Australian Constitution. (Law Book Co., £2). Sydney, 1925.
- MELBOURNE, A. C. V. Early Constitutional Development in Australia: [vol. 1], New South Wales, 1788-1856. (Oxford University Press, 25s.). London, 1934.
- WOOD, F. L. The Constitutional Development of Australia. (Harrap, 7s. 6d.). Sydney, 1933.
- WYNES, W. A. Legislative and executive powers in Australia: being a treatise on the legislative and executive powers of the Commonwealth and States of Australia under the Commonwealth of Australia Constitution Act. (Law Book Co., 32s. 6d.). Sydney, 1936.

OFFICIAL PUBLICATIONS.

- COMMONWEALTH:—Conference of Commonwealth and State Ministers held in Adelaide, 26th to 28th August, 1936. Proceedings and decisions of conference. (Government Printer, 3s. 8d.). Canberra, 1936. No. 268 of 1934-36.
- INCE, G. H. Report on unemployment insurance in Australia. (Government Printer, 3s. 8d.). Canberra, 1937. No. 1 of 1937.
- KINNEAR, Sir W. S. Report on health and pensions insurance. (Government Printer, 1s. 6d.). Canberra, 1937. No. 76 of 1937.
- KNOWLES, G. S. The Commonwealth of Australia Constitution Act (as altered to 1st July, 1936), and the acts altering the constitution: with notes, tables, indexes and appendices. (Government Printer, 15s.). Canberra, 1937.
- VICTORIA:—Parliament: *Select Committee on Widows' pensions and child endowment.* Progress report (Widows' pensions). (Government Printer, 6d.). Melbourne, 1936. D—No. 1 of 1936.

* It should be noted that several important books on this subject are out of print, and have therefore not been included.

Political History and International Relations.

- AUSTRAL-ASIATIC JOURNAL: a two-monthly review. (Australian Institute of International Affairs, Victorian division, 6s. per annum). Melbourne, 1937 to date.
 AUSTRALIAN QUARTERLY, THE: A Quarterly Review of Australian Affairs. (2s. per issue). Sydney, 1920 to date.
 CURRENT NOTES ON INTERNATIONAL AFFAIRS: [fortnightly]. (Department of External Affairs). Canberra, 1936 to date.
 LYND, J. S. Non-Britishers in Australia. 2nd edition. (Melbourne University Press, 6s.). Melbourne, 1935.
 SMITH, A. N. Thirty Years: The Commonwealth of Australia, 1901-1931. (Brown, Prior, 12s. 6d.). Melbourne, 1933.

RECENT PUBLICATIONS.

- BALL, W. McM. Possible peace. (Melbourne University Press, 3s.). Melbourne, 1936.
 DENNING, W. E. Caucus crisis: the rise and fall of the Scullin Government. (Cumberland Argus, 4s. 6d.). Parramatta, 1937.
 DUNCAN, W. G. K. and JAMES, C. V., eds. The future of immigration into Australia and New Zealand. (Angus & Robertson, 6s.). Sydney, 1937.
 MELBOURNE, A. C. V. The economic organization of the British Commonwealth. (University of Queensland, gratis). Brisbane, 1937.
 PORTES, G. V., ed. What the census reveals: by Norman Cowper and others. (F. W. Preece & Sons, 5s.). Adelaide, 1936.

OFFICIAL PUBLICATIONS.

- COMMONWEALTH: Imperial Conference, 1937: summary of proceedings. (Government Printer, 1s. 8d.). Canberra, 1937. No. 80 of 1937.
 NEW SOUTH WALES:—Assisted migration: correspondence between Prime Minister of the Commonwealth and Premier of New South Wales. (Government Printer, 1s. 6d.). Sydney, 1936. No. 37-A of 1936.

Economic and Social Conditions.

- BRIDGEN, J. B. and others. The Australian Tariff: An Economic Enquiry. (Melbourne University Press, 3s. 6d.). Melbourne, 1929.
 COPLAND, D. B. Australia in the World Crisis, 1929-1933. (Cambridge University Press, 9s.). Cambridge, 1934.
 COPLAND, D. B. and JAMES, C. V. [editors]. Cross currents of Australian finance: a book of documents. (Angus & Robertson, 7os. 6d.). Sydney, 1937.
 ECONOMIC RECORD, THE: The Journal of the Economic Society of Australia and New Zealand. (Melbourne University Press, 1os. per annum). Melbourne, 1925 to date.
 SHANN, E. O. G. An Economic History of Australia. (Cambridge University Press, 18s.). Cambridge, 1930.
 WINDETT, N. Australia as Producer and Trader 1920-1932. (Oxford University Press, 15s.). London, 1933.

RECENT PUBLICATIONS.

- GIBLIN, L. F. Some economic effects of the Australian tariff. (University of Adelaide, gratis). Adelaide, 1936.
 MACLACHLIN, W. R. Economic planning in Australia, 1929-1936. (T. S. King, 18s.). London, 1937.

OFFICIAL PUBLICATIONS.

- COMMONWEALTH:—Advisory Council on Nutrition. First report. (Government Printer). Canberra, 1936.
 Same. Second report. (Government Printer, 9d.). Canberra, 1936.
 Same. Third report. (Government Printer). Canberra, 1937.
 Royal Commission appointed to inquire into the monetary and banking systems at present in operation in Australia . . . Report. (Government Printer, 7s. 6d.). Canberra, 1937. No. 74 of 1937.
 NEW SOUTH WALES:—Labour and industry department: Committee appointed to investigate and report upon unemployment. Report upon employment in the state of New South Wales. (Government Printer). Sydney, 1937.
 TASMANIA:—MAULPON, F. R. E., economic adviser to the Government of Tasmania, and ANDERSON, D. L. The Tasmanian economy in 1936-37: a survey prepared on behalf of the State Finance Committee. (Government Printer). Hobart, 1937. (Studies in the Tasmanian economy: No. 4.)
 WESTERN AUSTRALIA:—Royal Commission on Money-lending and Hire-purchase Traders. Report. (Government Printer). Perth, 1936. No. 12 of 1936.
 See also Industries and Resources.

Industrial Organization.

- ANDERSON, G. Fixation of Wages in Australia. (Melbourne University Press, 21s.). Melbourne, 1929.
 SUTCLIFFE, J. T. History of Trade Unionism in Australia. (Macmillan, 6s.). Melbourne, 1921.

RECENT PUBLICATIONS.

- FOENANDER, O. de R. Towards industrial peace in Australia: a series of essays in the history of the Commonwealth Court of conciliation and arbitration. (Melbourne University Press, 21s.). Melbourne, 1937.

Industries, Resources and Trade.

- AUSTRALIA TO-DAY : Special Number of the Australian Traveller. (United Commercial Travellers' Association of Australia, 2s. *per issue*). Melbourne, 1905 to date.
 HARRIS, H. L. Economic Resources of Australia. (Angus & Robertson, 3s. 6d.). Sydney, 1933.
 PRATT, A., *editor*. The National Handbook of Australia's Industries. (Speciality Press, £3 3s.). Melbourne, 1934.

RECENT PUBLICATIONS.

- COX, E. W. The evolution of the Australian merino. (Angus & Robertson, 21s.). Sydney, 1936.
 MCNAIR, W. A. Radio advertising in Australia. (Angus & Robertson, 35s.). Sydney, 1937.

OFFICIAL PUBLICATIONS.

- COMMONWEALTH :—Australian Trade Delegation to India, Burma and Ceylon. Report. (Government Printer, 7s. 3d.). Canberra, 1936. No. 278 of 1934-36.
 Committee to inquire into the production of oil from coal by the hydrogenation process. Second report. (Government Printer, 6d.). Canberra, 1937. No. 69 of 1937.
 Rivett, Sir D. Report [on] oil production from coal viewed from an Australian standpoint. (Government Printer, 1s.). Canberra, 1937. No. 71 of 1937.
 NEW SOUTH WALES :—Parliament : *Legislative Assembly : Select committee on the tobacco industry in New South Wales*. Proceedings and minutes of evidence. (Government Printer, 6s. 3d.). Sydney, 1937. No. 21 of 1937.
 QUEENSLAND :—Royal commission on electricity. Report. (Government Printer, 2s. 6d.). Brisbane, 1936. No. A.48 of 1936.
 Royal Commission on Transport. Report on Transport and Harbour Board problems of Queensland. (Government Printer, 5s. 6d.). Brisbane, 1937. No. A.4 of 1937.
 SOUTH AUSTRALIA :—Royal Commission on afforestation. Report, together with appendices and map. (Government Printer, 1936). Adelaide, 1936. No. 56 of 1936.
 VICTORIA :—*Mines Department*. Deep leads of Victoria. (Government Printer). Melbourne, 1937.
 State Electricity Commission of Victoria. Report on extension of state electricity generating system for requirements of system load after 1940. (Government Printer, 5s.). Melbourne, 1937. No. 6 of 1937.
 Royal Commission on the Expediency of amending the *Water Act*, 1928, and other matters. Second progress report. (Government Printer, 1s.). Melbourne, 1936. No. 11 of 1936.
 Third progress report. (Government Printer, 1s. 3d.). Melbourne, 1936. No. 10 of 1936.
 Royal Commission on the *Water Act*. Fourth and Final Report. (Government Printer, 2s. 9d.). Melbourne, 1937. No. 2 of 1937.
 State rivers and water supply commission. Irrigation and water supply development in Victoria. (Government Printer). Melbourne, 1937.

Natural History.

- AUDAS, J. W. The Trees of Australia. (Whitcombe & Tombs, 21s.). Sydney, 1934.
 CAYLEY, N. W. What Bird is That? A Guide to the Birds of Australia. (Angus & Robertson, 12s. 6d.). Sydney, 1931.
 DAVID, Sir T. W. E. Explanatory Notes to accompany a New Geological Map of the Commonwealth of Australia. [Four sections of the map have appeared to date]. (Angus & Robertson, 20s.). Sydney, 1932.
 EWART, A. J. Flora of Victoria. (Melbourne University Press, 30s.). Melbourne, 1930.
 GRIMWADE, W. R. Anthography of the Eucalypt. (Angus & Robertson, 42s.). 2nd edition, Sydney, 1930.
 KINGHORN, J. R. The Snakes of Australia. (Angus & Robertson, 6s.). Sydney, 1929.
 MCKEOWN, K. C. Insect Wonders of Australia. (Angus & Robertson, 6s.). Sydney, 1935.
 SULMAN, F. A Popular Guide to the Wild Flowers of New South Wales. 2 vols. (Angus & Robertson, 12s.). Sydney, 1912.
 TILLYARD, R. J. Insects of Australia and New Zealand. (Angus & Robertson, 21s.). Sydney, 1926.

RECENT PUBLICATIONS.

- BARRETT, C. Koala : the story of Australia's native bear. (Robertson & Mullens, 2s.). Melbourne, 1937.
 CALDWELL, N. Fangs of the sea : in collaboration with Norman Ellison. (Angus & Robertson, 8s. 6d.). Sydney, 1936.
 DELL, Edgar. Flowers of Western Australia : [130 water-colours]. (West Australian Newspapers, 21s.). Perth, 1936.
 HAMILTON, A. G. Bush rambles. (Angus & Robertson, 6s.). Sydney, 1937.
 PRATT, A. The call of the koala. (Robertson & Mullens, 6s.). Melbourne, 1937.
 ROUGHLEY, T. C. Wonders of the Great Barrier Reef. (Angus & Robertson, 12s. 6d.). Sydney, 1936.

OFFICIAL PUBLICATIONS.

- VICTORIA :—*Mines Department*. Prospectors' guide : 3rd edition. (Government Printer, 1s.). Melbourne, 1936.

Aborigines.

- BASEDOW, H. The Australian Aboriginal. (F. W. Preece & Son, 218.). Adelaide, 1925.
 BROWN, A. R. The Social Organization of Australian Tribes. (Australian National Research Council, 58.). Sydney, 1931.
 ELKIN, A. P. Studies in Australian totemism. (Australian National Research Council, 58.). Sydney, 1933.
 NEEDHAM, Rev. J. S. White and Black in Australia. (S.P.C.K., 38. 6d.). London, 1935.
 SPENCER, Sir W. B. Wanderings in Wild Australia. 2 vols. (Macmillan, 428s.). London, 1928.
 SPENCER, Sir W. B., and GILLEN, F. J. The Arunta. 2 vols. (Macmillan, 368s.). London, 1927.
 See also the Annual Reports of the Administrator of the Northern Territory and of the Aboriginal Departments in Queensland, South Australia and Western Australia.

RECENT PUBLICATIONS.

- CHEWINGS, C. Back in the stone age: the natives of Central Australia. (Angus & Robertson, 78. 6d.). Sydney, 1936.
 DURACK, M. & E. Chumuna: [fiction]. (The Bulletin, 38. 6d.). Sydney, 1936.
 LOVE, Rev. J. A. R. Stone-age bushmen of to-day: life and adventure among a tribe of savages in North-western Australia. (Blackie, 8s. 6d.). London, 1936.

Education.

- BROWNE, G. S. Education in Australia: A comparative Study of the Educational Systems of the Six Australian States. (Macmillan, 218.). London, 1927.
 COLE, P. R., editor. The Education of the Adolescent in Australia. (Melbourne University Press 10s.). Melbourne, 1935.
 CRAMER, J. F. Australian Schools through American Eyes. (Melbourne University Press, 2s.) Melbourne, 1936.
 MCNN, R., and PITT, E. R. Australian Libraries: A Survey of Conditions and Suggestions for their Improvement. (Australian Council for Educational Research, 3s.). Melbourne, 1935.
 For records of specialized research, see the various publications of the Australian Council for Educational Research, Melbourne.

RECENT PUBLICATIONS.

- AUSTRALIAN AND NEW ZEALAND UNIVERSITIES' CONFERENCE . . . 1937. Report of proceedings. (University of Adelaide). Adelaide, 1937.
 SCOTT, E. A history of the University of Melbourne. (Melbourne University Press, 8s. 6d.). Melbourne, 1936.
 PRIESTLEY, R. E. The University and the national life: three addresses to Victorian political organizations. (Melbourne University Press, gratis). Melbourne, 1937.

OFFICIAL PUBLICATIONS.

- PRICE, A. G. Libraries in South Australia: report of an inquiry commissioned by the South Australian Government into the system of management of libraries maintained by the State. (Government Printer). Adelaide, 1937. No. 39 of 1937.

Literature.*

CRITICAL AND ANTHOLOGIES.

- ANNUAL CATALOGUE OF AUSTRALIAN PUBLICATIONS. (Commonwealth National Library, 28. per issue). Canberra, 1936 to date.
 COWLING, S. H., and MAURICE, F. (i.e., F. L. T. WILMOT), compilers. Australian essays. (Melbourne University Press, 4s. 6d.). Melbourne, 1935.
 GREEN, H. M. Outline of Australian Literature. (Whitcombe & Tombs, 5s.). Sydney, 1930.
 MACKANESS, G., compiler. Australian Short Stories. (Dent, 1s. 6d.). 2nd edition. London, 1932.
 MACKANESS, G., and HOLMES, J. D., compilers. Essays, Imaginative and Critical, chosen from Australian Writers. (Angus & Robertson, 6s.). Sydney, 1933.
 MACKANESS, J. S., and MACKANESS, G., compilers. The Wide Brown Land: A New Anthology of Australian Verse. (Angus & Robertson, 1s. 6d.). Sydney, 1931.
 SERLE, P., compiler. Bibliography of Australasian Poetry and Verse. (Melbourne University Press, 36s.). Melbourne, 1925.

RECENT PUBLICATIONS.

- FERGUSON, J. A., FOSTER, Mrs. A. G., and GREEN, H. M. The Howes and their press. (Sunnybrook Press, £3 3s.). Sydney, 1936.

Poetry.

RECENT PUBLICATIONS.

- INGAMELLS, R. Forgotten people. (F. W. Preece & Sons, 2s. 6d.). Adelaide, 1936.
 MACKENZIE, K. Our earth. (Angus & Robertson, £2 2s.). Sydney, 1937.

* The works of individual authors have not been included in the first section of this list. References to them will be found in Green and Serle.

Essays.

RECENT PUBLICATIONS.

MURDOCH, W. L. F. *Lucid intervals.* (Angus & Robertson, 4s. 6d.). Sydney, 1936.

Drama.

RECENT PUBLICATIONS.

MOORE, W. and MOORE, T. I., *eds.* *Best Australian one-act plays.* (Angus & Robertson, 6s.). Sydney, 1937.

Fiction.

RECENT PUBLICATIONS.

CLEMENTS, M. E. *Not by bread alone.* (Hutchinson, 7s. 6d.). London, 1937.
 ELDERSHAW, M. *Barnard* (i.e., M. F. Barnard and F. S. P. Eldershaw). *Plaque with laurel.* (Harrap, 7s. 6d.). London, 1937.
 FRANKLIN, S. M. *All that swagger.* (The Bulletin, 6s.). Sydney, 1936.
 PALMER, Vance. *Legend for Sanderson.* (Angus & Robertson, 6s.). Sydney, 1937.
 PRICHARD, K. S. (Mrs. H. V. H. Throssell). *Intimate strangers.* (Cape, 7s. 6d.). London, 1937.
 STIVENS, D. *The tramp : and other stories.* (Macmillan, 6s.). London, 1936.

Art.*

ART IN AUSTRALIA : A Quarterly Magazine. (J. Fairfax & Sons, 5s. *per issue*). Sydney, 1916 to date.
 MOORE, W. *The Story of Australian Art : From the Earliest Known Art of the Continent to the Art of To-day.* 2 vols. (Angus & Robertson, 50s.). Sydney, 1934.

RECENT PUBLICATIONS.

COATES, D. M. *George Coates : his art and his life.* (Dent, 12s. 6d.). London, 1937.
 LAWLOR, A. *Arquebus.* (Ruskin Press, 5s.). Melbourne, 1937.

* Books on the work of particular artists have been excluded from the list, though many of these, e.g., those published by Art in Australia, are indispensable for the study of Australian Art.

APPENDIX.

[Recent information and returns which have come to hand since the various chapters were sent to press are given hereunder.]

CHAPTER V.—TRANSPORT AND COMMUNICATION.

A. SHIPPING.

§ 2. Oversea Shipping.

2. Shipping Communication with various Countries, p. 109.—The following table gives the net tonnages of oversea vessels entered and cleared from Australian ports during 1936–37 according to direction :—

OVERSEA SHIPPING, AUSTRALIA.—DIRECTION, 1936–37.

Country.	Net Tonnage Entered.	Net Tonnage Cleared.
United Kingdom and European Countries ..	1,912,277	2,738,622
New Zealand	901,274	871,989
Asiatic Countries and Islands in the Pacific	2,063,584	2,061,726
Africa	253,496	46,052
North and Central America	1,140,738	611,008
South America	2,821	8,184
Total	6,274,190	6,337,581

3. Nationality of Oversea Shipping, p. 110.—Particulars of the nationality of oversea shipping during 1936–37 are as follows :—

OVERSEA SHIPPING, AUSTRALIA.—NATIONALITY OF VESSELS ENTERED, 1936–37.

Nationality.	Net Tonnage.
British—	
Australian	326,652
United Kingdom	3,447,244
Canadian	41,694
New Zealand	523,436
Other British	242,843
Total	4,581,869
Foreign—	
Danish	53,233
Dutch	173,011
French	82,636
German	152,506
Italian	43,222
Japanese	344,304
Norwegian	439,845
Swedish	104,281
United States	199,794
Other	99,489
Total	1,692,321
Grand Total	6,274,190

§ 5. Interstate Shipping.

2. Vessels and Net Tonnage Entered, p. 115.—(*Interstate Direct.*)—Particulars of the net tonnage of vessels recorded as having entered each State from any other State during 1936-37 are as follows :—

INTERSTATE SHIPPING.—NET TONNAGE OF VESSELS ENTERED, 1936-37.

State or Territory.	Net Tonnage. (a)
New South Wales	5,693,751
Victoria	4,640,688
Queensland	1,616,188
South Australia	3,043,302
Western Australia	1,869,071
Tasmania	1,559,603
Northern Territory	71,057
Total	18,493,660

(a) Includes overseas vessels on interstate voyages.

§ 6. Tonnage of Cargo.

1. Oversea and Interstate Cargo.—(ii) *Principal Ports*, p. 118.—The following table shows the tonnage of oversea and interstate cargo discharged and shipped during 1936-37 :—

TONNAGE OF CARGO DISCHARGED AND SHIPPED, STATES, 1936-37.

State.	Discharged.			Shipped.		
	Oversea.	Interstate.	Total.	Oversea.	Interstate.	Total.
New South Wales ..	2,130,009	3,088,306	5,218,315	1,859,461	3,406,783	5,266,246
Victoria ..	1,843,923	2,490,718	4,334,641	1,354,183	1,103,182	2,457,365
Queensland ..	417,266	695,370	1,112,636	713,875	468,398	1,182,273
South Australia ..	593,591	1,051,291	1,644,882	1,203,269	2,205,530	3,408,799
Western Australia ..	623,426	381,133	1,004,559	636,773	96,101	732,874
Tasmania ..	63,183	527,631	590,814	193,335	815,612	1,008,947
Northern Territory ..	8,276	10,952	19,228	266	2,654	2,920
Total, Australia ..	5,679,674	8,245,401	13,925,075	5,961,162	8,098,262	14,059,424

B. RAILWAYS.**§ 1. General.**

8. Summary of Operations, 1936-37, p. 124.—A summary of the working of all Government railways open for general traffic during 1936-37 is given hereunder:—

GOVERNMENT RAILWAYS, AUSTRALIA, 1936-37.

Particulars.	Federal.	N.S.W.	Vic.	Q'land. (f)	S. Aust. (g)	W. Aust.	Tas.	Total.
Miles Open	2,145	6,124	4,721	6,497	2,529	4,357	651	27,024
Revenue—								
(a) Coaching £	158	7,354	4,241	2,125	744	743	141	15,506
(a) Goods .. £	194	9,660	5,029	4,824	2,106	2,541	324	24,678
(a) Miscellaneous £	90	(h) 802	875	(c) 172	172	178	14	2,131
(a) Total Revenue £	442	17,816	10,145	6,949	3,022	3,462	479	42,315
(a) Expenditure £	411	12,355	7,280	5,336	2,568	2,616	311	31,055
(a) Train Miles Run ..	721	2,847	17,322	12,498	5,139	3,139	581	72,780
Earnings per train mile ..	128. sd.	128. sd.	178. sd.	178. sd.	178. sd.	178. sd.	178. sd.	178. sd.
Expenditure per train mile ..	118. sd.	118. sd.	118. sd.	118. sd.	118. sd.	118. sd.	118. sd.	118. sd.
Expenditure per cent. on Earnings ..	92.89	69.35	71.56	76.77	84.97	75.68	110.80	73.45
(a) Passenger Journeys ..	110	177,837	141,343	25,444	17,777	12,710	2,332	377,553
(a) Coal, Coke and Shale carried tons	7	7,248	245	664	133	283	473	9,053
(a) Other Minerals ..	..	1,367	(b) 573	551	(e) 399	(d) 232	..	2,800
(a) Live Stock ..	46	833	699	404	150	110	25	2,267
(a) Other Goods ..	74	5,237	5,869	3,239	1,566	2,096	326	18,407
(a) Total Freight ..	127	14,685	6,813	4,880	2,400	2,708	824	32,527

(a) ,000 omitted. (b) Included with Other Goods. (c) Included with Coaching. (d) Included with Coal, Coke and Shale. (e) Miscellaneous—includes Ores and Minerals. (f) Included Uniform Gauge Railway. (g) Including Road Motors. (h) From sale of electrical energy only, other miscellaneous included with Coaching.

[NOTE.—The figures in the above table taken from quarterly statements, are preliminary only, and do not entirely agree with the final particulars in the Annual Railways Reports of the several States.]

D. AVIATION.

14. Statistical Summary, p. 168.—The subjoined table gives a summary of operations in 1936-37:—

CIVIL AVIATION, 1936-37. (b)

Registered Aircraft Owners. (a)	Registered Aircraft. (a)	Licensed Pilots. (a)		Flights Carried Out.	Hours Flown.	Approx. Mileage.	Passengers Carried.	Weight of Goods Carried.	Weight of Mails Carried.
No.	No.	Private.	Commer.	No.	No.	Miles.	No.	lb.	lb.
AUSTRALIA.									
102	214	744	265	120,283	84,010	8,731,612	102,164	822,724	167,601
NEW GUINEA.									
9	24	4	22	15,701	16,371	1,466,355	13,100	24,441,860	122,063

(a) At 30th June, 1937.

(b) Preliminary figures only.

E. MOTOR VEHICLES.

5. Motor Vehicles Registered, p. 172.—Motor vehicles registered at 30th June, 1937 were as follows:—

MOTOR VEHICLES REGISTERED AT 30th JUNE, 1937.

State or Territory.	Motor Cars.	Commercial Vehicles.	Motor Cycles.	All Vehicles.	
				No.	Per 1,000 of Population.
New South Wales ..	100,993	69,211	23,430	280,630	104.23
Victoria	137,885	69,025	26,663	233,573	125.87
Queensland	68,857	34,868	8,040	111,765	112.66
South Australia ..	50,633	19,209	9,097	78,939	134.10
Western Australia ..	34,180	19,919	6,977	61,076	134.46
Tasmania	15,089	4,012	3,573	22,674	97.49
Northern Territory ..	336	704	41	1,081	198.20
Federal Capital Territory ..	1,346	315	82	1,743	169.62
Australia	499,289	214,296	77,912	791,497	115.86

F. POSTS, TELEGRAPHS AND TELEPHONES.

§ 6. Radio Telegraphy and Telephony.

2. Wireless Licences, 1936-37, p. 193.—The following table shows the number of each class of licence issued in each State, etc., during 1936-37:—

WIRELESS LICENCES IN FORCE AT 30th JUNE, 1937.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	F.C.T.	Australia.	Papua and New Guinea.	Grand Total.
Coast ..	2	1	6	1	5	3	1	..	19	9	28
Ship ..	92	89	15	10	4	1	1	..	212	..	212
Aircraft ..	5	9	5	1	2	..	1	..	23	..	23
Land (a) ..	8	3	32	13	45	7	29	..	137	26	163
Broadcasting (b) ..	25	18	16	6	7	6	..	1	79	1	80
Broadcast Listeners ..	356,859	288,717	101,324	98,917	61,151	29,780	116	1,433	938,297	34	938,331
Experimental ..	676	481	227	176	114	50	..	8	1,732	5	1,737
Portable ..	13	6	6	3	2	1	7	..	38	14	52
Special ..	34	25	10	..	3	..	..	..	72	..	72
Total ..	357,714	289,349	101,641	99,127	61,333	29,848	155	1,442	940,609	89	940,698

(a) In addition to the licensed stations there are two operated by the Postmaster-General's Department, viz., Camooweal (Q.) and Wave Hill (N.T.), and five low powered stations operated under the jurisdiction of the Government of the Territory of New Guinea. (b) There are also twenty-one stations operated by the National Broadcasting Service, including a short-wave station (3LR, Lyndhurst, Vic.)

CHAPTER XIII.—POPULATION.

§ 4. Distribution and Fluctuation of Population.

2. Growth and Distribution, p. 313.—The population of Australia at 30th June, 1937, was estimated at 6,831,303 persons distributed amongst the States and Territories as follows:—

ESTIMATED POPULATION AT 30th JUNE, 1937.

State or Territory.	Males.	Females.	Total.
New South Wales	1,360,058	1,332,601	2,692,659
Victoria	916,730	938,958	1,855,688
Queensland	519,502	472,589	992,091
South Australia	294,338	294,340	588,678
Western Australia	239,952	214,279	454,231
Tasmania	117,905	114,381	232,286
Northern Territory	3,690	1,764	5,454
Federal Capital Territory ..	5,612	4,664	10,276
Total	3,457,787	3,373,576	6,831,363

§ 2. Retail Prices and Housing, p. 540.

Retail Price Index—Numbers—Food, Groceries and Housing (all Houses) 1911 Base.—The index numbers in the following table are computed for the Commonwealth Court of Conciliation and Arbitration on a different basis to those given in § 2. The rent constituent is based upon the weighted average of *all houses*. The index numbers are directly comparable with those published in Labour Report, No. 15, and in Quarterly Summaries of Australian Statistics previous to No. 99.

RETAIL PRICE INDEX—NUMBERS—FOOD, GROCERIES AND HOUSING—ALL HOUSES.

RETAIL PRICE INDEX-NUMBERS-FOOD, GROCERIES AND HOUSING-ALL HOUSES-continued.

Weighted Average—Six Capitals in 1911 = 1,000.

Town.	1932.				1933.				1934.				1935.				1936.			
	March	June	September	December	March	June	September	December	March	June	September	December	March	June	September	December	March	June	September	December
SOUTH AUSTRALIA.																				
Adelaide ..	1,209	1,289	1,258	1,218	1,210	1,234	1,249	1,245	1,268	1,297	1,258	1,275	1,283	1,307	1,306	1,308	1,302	1,339	1,303	1,353
Kadina, etc. ..	1,166	1,157	1,146	1,103	1,056	1,066	1,066	1,105	1,139	1,157	1,132	1,145	1,156	1,181	1,107	1,106	1,153	1,169	1,193	1,204
Port Pirie ..	1,299	1,289	1,289	1,199	1,171	1,178	1,178	1,172	1,200	1,241	1,222	1,239	1,239	1,259	1,259	1,243	1,231	1,291	1,293	1,309
Mount Gambier ..	1,268	1,201	1,182	1,164	1,153	1,152	1,152	1,154	1,157	1,179	1,153	1,176	1,193	1,194	1,208	1,231	1,231	1,239	1,290	1,290
Peterborough ..	1,343	1,349	1,290	1,262	1,254	1,260	1,267	1,276	1,287	1,305	1,273	1,293	1,293	1,297	1,307	1,307	1,297	1,239	1,295	1,357
Weighted Average— South Australia ..	1,272	1,282	1,252	1,212	1,203	1,225	1,239	1,245	1,258	1,269	1,251	1,268	1,276	1,286	1,298	1,300	1,314	1,330	1,331	1,350
WESTERN AUSTRALIA.																				
Perth, etc. ..	1,351	1,393	1,346	1,277	1,250	1,293	1,271	1,268	1,299	1,316	1,311	1,311	1,311	1,319	1,311	1,311	1,311	1,350	1,368	1,391
Kalgoorlie, etc. ..	1,438	1,409	1,350	1,431	1,412	1,431	1,417	1,419	1,409	1,415	1,415	1,415	1,415	1,419	1,415	1,415	1,415	1,419	1,415	1,415
Norham ..	1,317	1,343	1,349	1,274	1,274	1,274	1,263	1,268	1,269	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275
Bunbury ..	1,245	1,279	1,251	1,239	1,192	1,229	1,212	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223
Geraldton ..	1,421	1,427	1,372	1,360	1,350	1,371	1,376	1,377	1,382	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381	1,381
Weighted Average— Western Australia ..	1,367	1,373	1,330	1,292	1,265	1,295	1,279	1,284	1,314	1,319	1,315	1,315	1,315	1,319	1,319	1,319	1,319	1,319	1,319	1,319
TASMANIA.																				
Hobart ..	1,453	1,456	1,427	1,410	1,367	1,381	1,411	1,395	1,473	1,417	1,439	1,450	1,451	1,459	1,459	1,451	1,458	1,459	1,493	1,520
Launceston ..	1,387	1,377	1,352	1,334	1,297	1,319	1,332	1,317	1,311	1,357	1,331	1,372	1,361	1,372	1,369	1,355	1,353	1,369	1,393	1,415
Burnie ..	1,376	1,347	1,320	1,297	1,259	1,285	1,285	1,282	1,289	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299
Devonport ..	1,395	1,382	1,335	1,328	1,294	1,305	1,295	1,298	1,283	1,343	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311
Queensdown ..	1,331	1,329	1,321	1,317	1,291	1,297	1,293	1,299	1,291	1,317	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311
Weighted Average— Tasmania ..	1,424	1,422	1,391	1,377	1,340	1,352	1,374	1,359	1,345	1,395	1,395	1,413	1,403	1,401	1,401	1,403	1,403	1,407	1,431	1,454
Weighted Average— Thirty Towns ..	1,423	1,409	1,380	1,354	1,321	1,332	1,345	1,344	1,355	1,380	1,380	1,392	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401
Weighted Average— Six Capital Cities ..	1,435	1,419	1,395	1,363	1,330	1,342	1,355	1,354	1,365	1,387	1,387	1,400	1,401	1,402	1,413	1,413	1,413	1,413	1,413	1,413

Retail Price Index-Numbers—Capital Cities—Annual Figures—1901 to 1936.—The index-numbers given in the separate parts of the table cannot be compared with each other in order to show the relative cost of housing and of food and groceries, since the weighted average cost for the six capital cities taken together in 1911 in each group or combination is made equal to 1,000.

Weighted Average—Six Capitals in 1911 = 1,000.

FOOD AND GROCERIES ONLY.

City.	1901.	1907.	1911.	1914.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Sydney	917	936	689	1,156	1,808	1,793	1,820	1,732	1,885	1,807	1,846	1,830	1,948	1,759	1,567	1,524	1,430	1,475	1,502	1,517
Melbourne	965	925	935	1,091	1,001	1,064	1,062	1,081	1,248	1,278	1,732	1,681	1,795	1,768	1,614	1,355	1,273	1,337	1,402	1,449
Brisbane	965	947	1,018	1,078	1,812	1,608	1,493	1,606	1,734	1,788	1,730	1,671	1,795	1,768	1,614	1,355	1,273	1,337	1,402	1,449
Adelaide	1,028	951	1,020	1,215	1,006	1,223	1,823	1,701	1,840	1,860	1,841	1,775	1,887	1,764	1,614	1,355	1,273	1,337	1,402	1,449
Perth	1,184	1,197	1,346	1,302	1,095	1,270	1,828	1,801	1,938	1,806	1,766	1,882	1,938	1,764	1,614	1,355	1,273	1,337	1,402	1,449
Hobart	1,011	1,010	1,058	1,212	2,025	1,794	1,803	1,849	1,810	1,868	1,788	1,727	1,833	1,764	1,614	1,355	1,273	1,337	1,402	1,449
Weighted Average— Six Capitals	972	955	1,000	1,144	1,002	1,084	1,805	1,732	1,785	1,829	1,789	1,761	1,866	1,682	1,477	1,425	1,342	1,400	1,412	1,475

HOUSING—ALL HOUSES.

City.	1901.	1907.	1911.	1914.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Sydney	858	911	1,000	1,279	1,474	1,535	1,617	1,687	1,729	1,813	1,808	1,857	1,870	1,830	1,697	1,486	1,457	1,460	1,472	1,510
Melbourne	733	804	970	1,126	1,502	1,597	1,672	1,729	1,742	1,839	1,850	1,835	1,810	1,720	1,607	1,442	1,457	1,460	1,472	1,510
Brisbane	488	575	707	882	1,079	1,206	1,247	1,242	1,251	1,459	1,480	1,487	1,505	1,314	1,204	1,171	1,294	1,367	1,420	1,472
Adelaide	629	812	1,112	1,040	1,289	1,360	1,450	1,551	1,565	1,553	1,601	1,605	1,607	1,277	1,204	1,134	1,327	1,400	1,452	1,490
Perth	801	854	810	914	1,065	1,002	1,124	1,134	1,154	1,310	1,331	1,382	1,395	1,107	1,304	1,177	1,166	1,159	1,160	1,175
Hobart	667	708	805	914	1,440	1,445	1,602	1,665	1,634	1,650	1,603	1,565	1,580	1,508	1,432	1,455	1,447	1,440	1,449	1,492
Weighted Average— Six Capitals	751	816	1,000	1,135	1,404	1,480	1,551	1,609	1,632	1,725	1,734	1,758	1,760	1,685	1,483	1,374	1,356	1,365	1,368	1,441

FOOD, GROCERIES AND HOUSING—ALL HOUSES—COMBINED.

City.	1901.	1907.	1911.	1914.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Sydney	893	926	1,031	1,266	1,724	1,634	1,737	1,714	1,762	1,844	1,830	1,839	1,916	1,792	1,596	1,508	1,439	1,468	1,490	1,517
Melbourne	870	875	950	1,105	1,737	1,625	1,749	1,703	1,745	1,801	1,781	1,746	1,812	1,672	1,448	1,378	1,310	1,367	1,420	1,472
Brisbane	869	794	915	997	1,511	1,442	1,510	1,506	1,535	1,653	1,598	1,595	1,620	1,441	1,315	1,258	1,244	1,254	1,308	1,379
Adelaide	864	804	1,058	1,143	1,653	1,574	1,670	1,693	1,727	1,739	1,742	1,730	1,772	1,593	1,341	1,266	1,235	1,275	1,299	1,314
Perth	867	860	1,126	1,143	1,699	1,495	1,538	1,580	1,616	1,640	1,605	1,677	1,715	1,591	1,416	1,329	1,271	1,320	1,311	1,383
Hobart	869	886	954	1,090	1,785	1,651	1,756	1,773	1,738	1,778	1,712	1,661	1,729	1,647	1,472	1,437	1,369	1,418	1,429	1,472
Weighted Average— Six Capitals	880	897	1,000	1,140	1,697	1,600	1,700	1,682	1,722	1,786	1,766	1,760	1,822	1,683	1,479	1,403	1,345	1,385	1,420	1,461

B.—WAGES.

§ 3. The Basic Wage in Australia.

2. The Commonwealth Basic Wage, p. 563.—The basic rates of wage ruling in the various Capital Cities on 1st December, 1937, under awards of the Commonwealth Arbitration Court are as follows:—

BASIC WEEKLY WAGE RATES FIXED BY COMMONWEALTH COURT OF CONCILIATION AND ARBITRATION FOR EACH CAPITAL CITY.(a)

Capital.						1st December, 1937.	
						s.	d.
Sydney	..	..	..	..	..	78	0
Melbourne	..	..	..	..	..	77	0
Brisbane	..	..	..	..	..	74	0
Adelaide	..	..	..	..	..	74	0
Perth	..	..	..	..	..	75	0
Hobart	..	..	..	..	..	75	0
Six Capitals	..	..	..	..	..	76	0

(a) "Court" Series Index-numbers—Judgment of 23rd June, 1937.

C.—EMPLOYMENT.

§ 2. Fluctuations in Employment.

2. Unemployment, p. 588.—The following are the percentages of unemployment in each State for the first three quarters of 1937:—

UNEMPLOYMENT.—PERCENTAGES.

Period.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
1937—								
March	Quarter	..	11.8	9.5	7.7	9.5	5.4	7.9
June	"	..	11.4	9.6	7.6	8.3	5.6	10.4
September	"	..	10.5	9.5	7.2	8.4	6.6	10.6

CHAPTER XVIII.

MINERAL INDUSTRY.

§ 1. The Mineral Wealth of Australia.

3. Value of Production, p. 606.—The following table gives the value of Australian mineral production for the year 1936:—

MINERAL PRODUCTION.—VALUE, 1936.

Mineral.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Ter.	Total.
	£	£	£	£	£	£	£	£
Coal	5,120,850	253,835	858,732	..	331,529	92,269	..	6,603,215
Coal—Brown	..	323,914	..	..	..	..	..	323,914
Copper	53,687	..	161,688	22,009	..	..	..	237,384
Gold	525,792	987,004	1,048,748	66,593	97	550,734	1,871	2,182,738
Ironstone	..	..	1,351	2,170,392	..	..	..	2,171,743
Lead	(a)	..	629,353	200	..	131,413	..	(b) 763,866
Silver	5,142	525	269,848	157	11,773	81,036	..	(b) 368,481
Silver-lead Ores, Concentrates, &c.	3,815,643	..	..	..	..	..	..	3,815,643
Tin and Tin Ores	268,454	14,750	157,889	..	6,882	206,656	4,176	658,807
Zinc and Concentrates	198,460	..	453,356	..	..	283,105	..	934,921
Other Minerals	240,668	11,309	92,763	253,415	110,008	151,243	16,553	882,049
Total	0,240,696	1,591,337	1,673,628	1,513,366	7,786,688	1,657,747	28,601	27,562,063

(a) The bulk of the silver and lead is contained in the concentrates, etc., dispatched from the Broken Hill field and treated outside this State.

(b) Incomplete see Note (a).

CHAPTER XXVI. PRIVATE FINANCE.

B. BANKING.

The Royal Commission appointed to inquire into the monetary and banking systems in Australia presented its report in August, 1937, and a summary of its recommendations is reprinted below :—

SUMMARY OF RECOMMENDATIONS:

COMMONWEALTH BANK.

(a) *Directorate.*

"1. The Governor should be Chairman of the Board by virtue of his office* and should possess qualifications and receive a salary commensurate with the importance of the office. The appointment of the Governor should not be made on the basis of seniority nor is it even essential that he should already be in the service of the Bank.

"2. The six Directors other than the Governor and the Secretary to the Treasury should be appointed for a term of six years instead of seven as at present, one should retire each year, and be eligible for re-appointment, but provision should be made that no director shall continue to hold office after reaching the age of 70.

"3. The limitation on the field of choice of directors in Section 11 (2) (b) of the Act should be removed. The members of the Board should be selected for capacity and diversity of experience and contact, and not as representatives of special interests.

"4. The "Commonwealth Bank Act 1911-1932," Section 12B, which provides that there "shall be" a Board of Advice in London, should be made permissive. This Board is not at present constituted, and there seems to be no necessity for such a Board in present circumstances.

(b) *Savings Bank.*

"5. The provision in the Commonwealth Bank Act, Section 35E, for the separate control of the Commonwealth Savings Bank, should be repealed.

"6. Power should be given to the Commonwealth Savings Bank to make deposits with trading banks if the Board so chooses.

(c) *Note Issue Reserve.*

"7. The statutory provisions which require the Commonwealth Bank to hold gold or sterling in proportion to the amount of Australian notes on issue should be repealed.

"8. The note issue should be limited by law to a fixed maximum (for example, £60m.) subject to the right of the bank to exceed the maximum by a stated amount (for example £10m.) with the consent of the Treasurer.*

(d) *Deposits by Trading Banks with Commonwealth Bank.*

"9. The Commonwealth Parliament should legislate to provide that the Commonwealth Bank Board, with the consent of the Treasurer, may require every trading bank to keep with the Commonwealth Bank a deposit of an amount not less than a percentage, specified in the requisition, of the liability of that bank to its depositors in Australia.*

"10. Each trading bank should be required to keep on deposit the same percentage. The Board should have power at its discretion to vary the percentage from time to time within the limit fixed by the consent of the Treasurer.

"11. The authority to requisition should not remain in force for more than six months after the consent of the Treasurer has been given, but the Treasurer should have power to consent to its extension for a further period not exceeding twelve months. In any period of two years the power should not be exercised for a longer period or periods than eighteen months.

LONDON FUNDS OF THE AUSTRALIAN BANKING SYSTEM.

(a) *Commonwealth Bank's Requirements.*

"12. A new Exchange Mobilization Agreement on the lines suggested, binding for a period of years, should be entered into between the Commonwealth Bank and the trading banks.*

* Majority decision.

(b) Publication of Amount of these Funds.

"13. The aggregate figures of the London funds of the banking system should be published regularly.

"14. The figures should not be published until at least six months after the date to which they relate.*

TREASURY-BILLS.

"15. The Governments and the Commonwealth Bank should explore the possibility of establishing an open market for treasury-bills by way of regular offers of bills for public tender.*

RELATIONS BETWEEN GOVERNMENTS AND THE COMMONWEALTH BANK.

"There should be some permanent machinery for the Loan Council which would enable the Loan Council, Commonwealth and State Treasuries, and the Commonwealth Bank to establish and maintain close contact with one another.

PREVENTION OF BANK FAILURES.

"16. In the public interest the Commonwealth Bank should take control of the affairs of any bank which is unable to meet its immediate obligations, and should be given any additional powers which it may require for this purpose.

STATISTICS.

"17. The Commonwealth Bank should be given statutory power, similar to that of the Commonwealth Statistician, to obtain statistics which it requires for its purposes as a central bank, and it should take steps to obtain such statistics.

"18. The Commonwealth Bank should publish a monthly bulletin containing such statistics as the Board thinks fit, together with explanatory comment, and other information and advice which may be of value to the public.

DISTRIBUTION OF CREDIT.

"19. In order to promote a wise distribution of credit the Commonwealth Bank should equip itself with all possible facilities for ascertaining economic trends in Australia and abroad, so that it can advise trading banks as to the directions in which it is desirable in the national interest that advances should be made.

TRADING BANKS.

(a) Accounts.

"20. In addition to any accounts required by the law of the country or State in which it is incorporated, every bank should supply, to a prescribed authority, accounts relating to—

- (a) Its liabilities in Australia and its liabilities elsewhere than in Australia incurred in respect of its Australian business.
- (b) Its assets in Australia and its assets out of Australia in respect of its Australian business.
- (c) Its liabilities elsewhere than in Australia and its assets elsewhere than in Australia, in either case not being in respect of its Australian business either in detail or in an aggregate amount.
- (d) Its capital, reserves, and undistributed profits, and
- (e) A profit and loss account.

"21. Such accounts should be in a form to be prescribed, by legislation or regulation made in accordance therewith, and should in the case of the balance-sheet be made up as at the date prescribed and in the case of the profit and loss account cover the period prescribed, and insofar as the particulars relate to its Australian business shall be expressed in Australian currency. Where an item is not expressed in Australian currency, the nature of the currency used should be indicated.

These accounts should be published in the *Commonwealth Gazette*.

(b) Disclosure of Profits.

"22. (a) Before arriving at the profits of any accounting period, the directors should be entitled to make reasonable provision for debts which are doubtful, and interest which

* Majority decision.

may not be received, without disclosure except in the circumstances referred to in (f), provided that such provision does not exceed the amount required to cover the anticipated losses under these headings.

(b) If the directors desire to make any additional provision for either of these purposes, or for other contingencies, such additional provision should be made out of disclosed profits, as is the present practice of one of the trading banks.

(c) Provision for the depreciation of premises or to write down the value of premises or for depreciation of investments should be made out of disclosed profits.

(d) Transfers from inner reserves to the credit of the profit and loss account during the accounting period should be disclosed.

(e) The existence of inner reserves should be indicated in a similar manner in the accounts of all the banks.

(f) (NOTE.—These recommendations are subject to our further recommendation, included in "Banking legislation", that the Treasurer be given power to direct the Auditor-General to investigate the affairs of any bank).

(c) *Regulation of Profits.*

"If trading banks' profits are found to exceed what may be regarded as a fair return for services rendered, the Government should consider whether these profits should be regulated or limited.*

(d) *Statistics.*

"23. The Commonwealth Statistician should obtain from the trading banks, and publish, statistics covering at least—

- (a) monthly averages of assets and liabilities within Australia, analysed in more detail than the existing quarterly averages, e.g., showing separately treasury-bills, deposits with Commonwealth Bank, and advances;
- (b) monthly totals of debits to customers' accounts within Australia;
- (c) monthly figures of assets and liabilities outside Australia, in respect of Australian business (subject to our recommendation relating to the publication of London funds);
- (d) an annual analysis of total advances within Australia, classified according to industries.

BANKING LEGISLATION.

"24. The enactment by the Commonwealth Parliament of banking legislation upon the following lines :—

- (a) Prohibit any person, firm, or company, from carrying on the business of a bank without licence or authority from the Treasurer of the Commonwealth. For this purpose, include any cheque-paying bank or savings bank and any branch established in Australia by any bank founded elsewhere; but exclude any State bank which does not extend beyond the limits of the State concerned.
- (b) In the case of any institution carrying on the business, when the Act comes into force, provide for the authority being given, in the first instance, as a matter of right.
- (c) Give discretion to grant or refuse any application to establish a new business, but prescribe conditions (a) as to capital, in the case of a company wherever formed, and (b) as to registration of an attorney, and of the constitution, in the case of any company formed outside Australia.
- (d) Define "trading bank" and "savings bank" by reference to schedules of the existing institutions, but provide for additions thereto by proclamation.
- (e) Prohibit the use of title "bank" except by—
 - (i) State banks and trading or savings banks authorized under the Act;
 - or
 - (ii) other banks with the consent of the Treasurer.

* Majority decision.

(f) Provide, in the case of trading banks, for—

- (i) Minimum deposits in the circumstances and in the manner recommended.*
 - (ii) Publication of annual accounts and balance-sheets in the form prescribed by the Act or by Regulations.
 - (iii) A statutory declaration in the form prescribed.
 - (iv) Power to the Treasurer to direct the Auditor-General to investigate the affairs of any bank and to report upon such matters as the Treasurer directs.
- (g) Give the Treasurer power to withdraw the licence or authority in the event of wilful or persistent failure to comply with the provisions set out under (f).

BANK CHARGES.

“A comprehensive and systematic revision of charges by banks for the collection of cheques and on drafts within the Commonwealth is considered necessary.

CLEARING POOL.

“If continuance of the guarantee provided by each bank by way of a deposit of notes, against default in settlement of clearing balances, is considered necessary, it is thought better that the guarantee should take the form of deposits with the Commonwealth Bank, which would allow of a reduction in the note issue.

NATIONALIZATION OF BANKING.

“The most desirable banking system in the present circumstances of Australia is one which includes privately-owned trading banks. The system contemplated is one in which—

- I. A strong central bank regulates the volume of credit and pays some attention to its distribution.
- II. The distribution of credit is left to privately-owned trading banks, working for profit, but regulated in the manner already indicated.*

SAVINGS BANKS.

“25. The savings banks should consider the desirability of lowering the maximum amounts on which interest is paid for deposits at call or very short notice, and of encouraging the conversion of any excess over this maximum into fixed deposits with themselves.

THE SAVINGS BANK OF SOUTH AUSTRALIA.

“26. The Government of South Australia should consider the question of an amendment of the State law for the purpose of—

- (a) giving the trustees of the Savings Bank of South Australia a wider discretion over the allocation of the profits, and
- (b) authorizing them to declare a current rate of interest.

MORTGAGE BANKING.

“27. A mortgage bank or mortgage banks should be established to provide facilities for fixed and long-term lending.

CAPITAL FOR SMALL SECONDARY INDUSTRIES.

“28. The Governments, with the assistance of the Commonwealth Bank, should investigate the problem of setting up institutions to supply the needs of small concerns in secondary industries.

DECIMAL COINAGE.

“29. A system of decimal coinage should be introduced based upon the division of the Australian pound into one thousand parts.

MINTS.

“30. The Commonwealth should take over from the States of Victoria and Western Australia their interests in the Mints.”

* Majority decision.

CHAPTER XXVII.

PUBLIC FINANCE.

(See pp. 834, 841, 845, 881.)

THE FINANCIAL CRISIS.

1. **General.**—It is not within the functions of the Official Year Book to attempt a full record of the financial and economic crisis which began to develop in Australia towards the end of 1929, and space does not permit of a presentation of the whole of the statistical and financial data relevant to the subject. The principal documents relating to the crisis have been conveniently put together, with some brief comment, by Professors E. G. Shann and D. B. Copland in a series of compact volumes entitled *The Crisis in Australian Finance 1929 to 1931*, *The Battle of the Plans*, *The Australian Price Structure 1932*, and *Cross Currents in Australian Finance*, the co-editor with Professor Copland of the latter volume being C. V. Jones. These may be supplemented by the official reports of the Premiers' Conferences, especially those dealing with the Conferences of 25th May to 11th June, 1931 (P.P. No. 236), 28th January to 5th February, 1932 (P.P. No. 12), 14th to 21st April, 1932 (C.3847), 28th June to 8th July, 1932 (F.1969), and 8th to 14th June, 1933 (F.2184). Particular reference may be made to the Treasury Officers' Report on the Budgets of 1931-32 and 1932-33 (F.1999); and to the Report of the Committee appointed to make a "Preliminary Survey of the Economic Problem" (C.3847). Discussions of the economic and financial issues will be found in the "Economic Survey of Australia" published in the *Annals of the American Academy of Political and Social Science* (Philadelphia) for November, 1931; in the Circulars of the Bank of New South Wales (Sydney); in Nos. 11 to 17 of the *Economic Record* (Melbourne) and in its Special Supplement (October, 1932) containing the "Papers on World Economic Influences" read before Section G of the A.N.Z.A.A.S. (Sydney Congress, August, 1932); in *Australia in the World Depression*, by Dr. E. R. Walker (1933); in *Australia in the World Crisis 1929-1933*, by Professor D. B. Copland (1934); and in *Economic Planning in Australia 1929-1936*, by W. R. Maclaurin (1937).

2. **Elements of the Situation.**—The elements of the situation before the depression began were:—

- (1) A national income of about £100 per head in 1928-29.
- (2) Oversea interest obligations, fixed for the most part in sterling, of about £5 per head.
- (3) Imports of about £27 per head in 1926-27, falling to £23 per head in 1928-29.
- (4) Exports of commodities, which for some years had failed to pay for imports, amounting in 1928-29 to £22 per head.
- (5) A standing net debit of interest obligations and balance of visible trade, which had been met by overseas long-term loans averaging about £5 per head for some years, helped by some investment of private capital from overseas.
- (6) Deficits in Government finance for the Commonwealth and all States, which for 1929-30 amounted to about £1 15s. per head.

On this situation impinged:—

- (1) A world fall in commodity prices, with consequent general depression and increase in the burden of fixed money claims which were estimated for Australia at about £20 per head in 1928-29.
- (2) A rapid fall in Australian export prices, which, in gold, had declined by the end of 1931 to about 32 per cent. of the 1927-28 level, and to 58 per cent. even in Australian currency; while, at the same time, interest obligations remained fixed in sterling for the most part, and import prices fell very much less than export prices.
- (3) A total cessation of overseas long-term loans, which had in recent years roughly balanced interest obligations overseas.

- (4) Government deficits, which had been about £1 15s. per head in 1929-30 rose to over £4 per head in 1930-31, and threatened to be £7 per head in 1931-32, with consequent further loss of business confidence and intensification of the depression.

3. Attempts to meet the Situation.—A brief diary of the attempts to meet this situation may be set out as follows:—

April, 1930.—Special customs surcharges of 50 per cent. of the amount of duty already imposed were placed on certain items of import: and the importation of 78 items was prohibited by proclamation.

July-August.—Sir Otto Niemeyer, representing the Bank of England, visited Australia at the invitation of the Commonwealth Government, and made a statement on severely deflationary lines to a Conference of Premiers in Melbourne (see *The Crisis in Australian Finance*, p. 18). The Premiers resolved to balance budgets in 1930-31.

22nd January, 1931.—The Commonwealth Court of Arbitration after a protracted hearing made a comprehensive survey of the economic position (see *The Crisis*, pp. 102-145), and awarded a 10 per cent. reduction in all railway wages which were the subject of the case, operative from the 1st February, 1931. This judgment was followed by others, making the same reduction in practically all wages and salaries which were determined by Federal award. This reduction of 10 per cent. was in addition to the "automatic" adjustment to falling prices, and made the total reduction over 20 per cent. on the wage rates of 1920. Wages under State jurisdiction were gradually brought into line, except in New South Wales where no adjustment was made in State awards for some time.

January to February.—*Premiers' Conference, Canberra and Melbourne.*—A committee of Treasury officers presented a report analysing the financial and economic position. The report preserved much of the deflationary tone of Sir Otto Niemeyer's statement, and commented adversely on the high exchange rate. Curtailment of Government expenditure was strongly urged, but no definite reductions were proposed. This report was signed by four of the State Under-Treasurers only.

Mr. Lang (Premier of New South Wales) proposed as an alternative the reduction of internal interest on Government bonds to 3 per cent., the cessation of oversea interest payments pending agreement for a similar reduction, and the substitution for the gold standard of "currency based on the wealth of Australia".

The Conference rejected Mr. Lang's motion and resolved to aim at budget equilibrium in three years, reducing salaries and wages on a cost of living basis, taxing interest on Government bonds at the source and putting on the banks the responsibility of reducing interest rates.

January.—*The Unpegging of the Exchange.*—Australian exchange with sterling had been held by the banks at $8\frac{1}{2}$ per cent. discount since 6th October, 1930. On 5th January, 1931, on the initiative of the Bank of New South Wales, the rate was allowed to move up until it reached 30 per cent. on 20th January, 1931, and it was held at that figure notwithstanding some competition at higher rates by "outside" dealers.

2nd April.—Letter from the Commonwealth Bank to the Chairman of the Loan Council, stating that it was unable to finance Governments beyond the outstanding £25,000,000 in London, and a limit of £25,000,000 in Australia. This limit in Australia was bound to be, and was, in fact, reached within three months.

25th May to 11th June.—*Premiers' Conference, Melbourne.*—The Conference had before it a report of a Committee of economists and Treasury officers, of which Professor D. B. Copland was Chairman. This report proposed a definite scheme of reduction of expenditure of all kinds, including wages, salaries, pensions and interest. The reduction aimed at was from 20 to 25 per cent. below the 1928-29 level, based on the actual reduction in wage rates in Federal awards of something over 20 per cent. The aim of the proposals was to reduce total Government deficits in 1931-32 from a prospective £40,000,000 to some figure not much above £10,000,000. This report, which is printed in full at the end of this section, formed the basis of the "Premiers' Plan," adopted on the 10th June, 1931.

10th June.—Gold Position.—The minimum proportion of gold to be held against notes was reduced from 25 per cent. to 15 per cent., with provision for gradual restoration over a term not exceeding five years to 25 per cent. This amendment of the Commonwealth Bank Act was put through by general consent to permit further shipments of gold to meet short-term debt in London.

26th June.—Reduction of Bank Deposit and Advance Rates.—The Commonwealth Bank and the trading banks reduced by 1 per cent. the rates on new fixed deposits or renewals.

1st July.—The Commonwealth Bank reduced rates for advances by 1 per cent. The other trading banks by successive small steps fell into line.

The Commonwealth and State Savings Banks reduced interest rates by 1 per cent., except in Victoria where successive reductions of one-half, one-quarter, and again one-quarter of 1 per cent. were made by the State Savings Bank.

July–August.—Conversion Loan.—A conversion loan was launched to reduce the rate of interest on all internal Government debt by approximately $22\frac{1}{2}$ per cent.

The results of the conversion plan will be best understood by consideration of the following figures:—

	£
Total Internal public debt at 31st July, 1931	557,998,904
Conversion applications notified	510,331,153
Dissents notified	16,655,769
Conversion effected automatically (in absence of notification of either conversion or dissent)	31,011,982
	<hr/> 557,998,904 <hr/>

The amount held by dissentients was thus a little less than 3 per cent. of the total outstanding public debts.

The annual savings in interest to all the Governments for a full year in consequence of the conversions effected were calculated to be about £0,500,000, but some part of this relief was to be passed on to settlers and other debtors to the State Governments.

31st July.—A reduction in the rate of interest on Treasury Bills from 6 per cent. to 4 per cent. was announced.

10th to 14th August, and 1st to 12th September.—Premiers' Conference, Melbourne. The several Governments reported their attempts to adjust their budgets to the "Premiers' Plan." After some allowance had been made for unforeseen contingencies, the new budgets appeared on the whole to be in fair conformity with the "Plan," though for some of the State Governments there was an appreciable gap. Measures were agreed upon for applying compulsion to the small amount of Debt which had not been converted, and provision was made for the redemption from the National Debt Sinking Fund of securities held by persons in necessitous circumstances.

21st September.—Great Britain ceased payment in gold, and sterling depreciated over 20 per cent. in terms thereof, thus making a corresponding reduction in the real burden of interest payments by Australian Governments, which are for the most part fixed in sterling. Australian exchange was kept for the time at the old discount of 30 per cent. with sterling, so that no direct relief to Australian budgets ensued.

30th October.—The Commonwealth Government made provision for the payment of a bounty of $4\frac{1}{2}$ d. per bushel on wheat produced in the 1931–32 season.

27th November.—Further reduction in bank deposit rates of one-half and one-quarter of one per cent. on short and long-term deposits respectively.

3rd December.—Exchange.—Commonwealth Bank Board resolved to take responsibility for the regulation of sterling exchange and to announce rates for the coming week every Friday. The rate was fixed at £125 for £100 sterling, in place of £130, which had been the official bank rate since 29th January. It may be noted that sterling in the preceding week had depreciated from about 20 per cent. discount on gold

to about 30 per cent. For some weeks the banks had been rationing their purchases of exchange, with the result that the "open market" rate had fallen considerably below the "carded" rates.

January, 1932.—Letter from the Commonwealth Bank to the Chairman of the Loan Council calling attention to the growth of the floating debt, and suggesting that "national finance" might be refused.

28th January to 5th February.—*Premiers' Conference, Melbourne.*—A serious drift in State finances was revealed. After receiving assurances that further economies would be sought, the Commonwealth Bank agreed to provide further assistance for the small States. During the meetings, New South Wales announced its default on interest payments due in London, New York and Australia. The payments were met, after a short delay, by the Commonwealth Government.

February.—A beginning was made in the revision of the tariff and the removal of prohibitions on imports.

8th March.—Further reductions in bank deposit rates of one-half per cent. on 3 months' deposits and one-quarter of one per cent. on 6 and 12 months' deposits.

12th March.—The Financial Agreements (Commonwealth Liability) Act resolved all doubts as to the liability of the Commonwealth for debts taken over in pursuance of the Financial Agreement.

March to May.—The Financial Agreements Enforcement legislation was enacted, giving the Commonwealth drastic powers to attach State revenues and other moneys in the event of failure by a State to pay to the Commonwealth moneys due under the Financial Agreement. The High Court decided in favour of the Commonwealth on a writ for recovery of interest paid on behalf of New South Wales. The New South Wales Government then contested the validity of the Enforcement Acts, which were upheld by the High Court, leave to appeal being refused.

13th April.—A Committee of Experts appointed by the Commonwealth Government to make a "Preliminary Survey of the Economic Problem" issued its report, recommending the restoration of economic balance by a combination of reduced costs and a high exchange rate, the former to be secured in part by the general application by State wage-fixing authorities of the 10 per cent. "cut" in real wages. The chief measures of more immediate alleviation recommended were (i) systematic revision of the customs tariff; (ii) construction of public works when the reductions in costs of construction made it possible for such works to earn interest; (iii) advances on debentures to large-scale enterprises for which three-quarters of the needed capital had been privately subscribed; and (iv) the settlement of married recipients of sustenance as cottagers on established farms.

14th to 21st April.—*Premiers' Conference, Melbourne.*—It was decided to raise a loan of £2,400,000 for expenditure on unemployment relief works.

May.—The trade union unemployment percentage reached the peak of 30 per cent. Mr. Lang was dismissed by the Governor of New South Wales, and the Victorian Labour Government was defeated at the elections. A widespread agitation for a higher exchange rate commenced, and lasted for some months.

11th June.—The State Labour Party was defeated in the New South Wales elections, while in Queensland the Labour Party was victorious.

16th and 17th June.—The New South Wales Industrial Commission was reconstituted. The Commonwealth Court of Arbitration refused an application for restoration of the special 10 per cent. reduction in wages.

21st June.—The Commonwealth Bank Act was amended to allow part of the note reserve to be held in English sterling. Subsequently, £G10,000,528 of gold was shipped overseas from the gold reserve of the Australian Notes Fund.

May-June.—Further reductions in bank deposit rates of one-quarter and one-half of one per cent. on 12 and 24 months' deposits, respectively.

30th June.—*Balance of Payments.*—The balance on current account, excluding the movement of monetary gold, was estimated to be in Australia's favour by approximately £7,276,000 sterling in 1931-32, as against a debit balance in 1930-31 of approximately £16,732,000 sterling.

28th June to 8th July.—*Premiers' Conference, Canberra and Sydney.*—The Conference unanimously affirmed its adherence to the "Premiers' Plan" of 1931. The estimated deficits for 1931-32 were reported to the Conference, and, with the notable exceptions of New South Wales and Queensland, they disclosed a satisfactory conformity with the "planned" deficits. The Conference agreed to reduce the total deficits in 1932-33 to £9,000,000 (inclusive of £6.45 millions for sinking funds), and arranged for a three-year unemployment relief works plan involving the ultimate expenditure of £15,000,000. Of this amount, £7,000,000 was to be spent in 1932-33, in addition to the ordinary works programme of £6,000,000.

1st July.—The Commonwealth Bank reduced its rate for advances by a further one-half of one per cent., bringing the rate to 5 per cent. The average reduction by the trading banks, since 1st October, 1931, was stated to be 1 per cent. Further reductions were anticipated by prominent bankers.

21st July to 19th August.—Imperial Economic Conference at Ottawa.

26th August.—The New South Wales Industrial Commission reduced the basic wage for adult males from £4 2s. 6d. to £3 10s., and for adult females from £2 4s. 6d. to £1 18s.

1st September.—The Commonwealth Budget provided *inter alia* for a further reduction of pensions and salaries, decreased customs duties, the final removal of import prohibitions, exemptions from Sales Tax and primage, and suspension of the gold bounty, which had been introduced on 1st January, 1931.

September to November.—Wool prices showed some improvement; share prices advanced substantially; the value of imports and Commonwealth customs revenues increased steadily. Early in October all the 4 per cent. Commonwealth bonds reached par, after allowing for accrued interest.

4th October.—A conversion loan was issued in London at $3\frac{1}{2}$ per cent., issue price £97 $\frac{1}{2}$, maturing 1936-37, to replace £12,360,000 of $5\frac{1}{2}$ per cent. N.S.W. stock maturing in October, 1932.

14th October.—Revision of the Customs Tariff to validate the Ottawa Agreement. The margin of preference under the British Preferential Tariff was considerably widened, mainly by means of increased duties on a wide range of foreign manufactures.

24th to 29th October.—*Premiers' Conference, Melbourne.*—It was decided to place on the Australian market a loan of £8,000,000 at $3\frac{1}{2}$ per cent., maturing in 1942, for Unemployment Relief and the funding of Treasury Bills. A reduction in the rate of interest on Treasury Bills from 4 per cent. to $3\frac{1}{2}$ per cent. was announced.

1st November.—Further reductions in bank deposit rates of one-quarter of one per cent. for all terms, bringing the rates down to $2\frac{1}{4}$, $2\frac{1}{2}$, 3 and $3\frac{1}{4}$ per cent. on 3, 6, 12 and 24 months' deposits respectively.

5th December.—In view of the improved revenue position, the Commonwealth Government made substantial reductions in land and income (property) taxes, further exemptions from sales tax, increased the payments to certain Invalid and Old-age pensioners, and provided from revenue £2,000,000 for assistance to wheat-growers and £250,000 for assistance to other primary producers.

January, 1933.—Considerable improvement in the unemployment situation was shown in the trade union percentages for the last quarter of 1932. This improvement has continued.

20th January.—A reduction in the rate of interest on Treasury Bills from $3\frac{1}{2}$ per cent. to $3\frac{1}{4}$ per cent. was announced.

4th February.—The Loan Council agreed with the Commonwealth Bank that future requirements for loan programmes should be raised on the open market.

7th February.—Further reductions in bank deposit rates of one-quarter of 1 per cent. for all terms, bringing the rates down to $2\frac{1}{4}$, $2\frac{1}{2}$ and 3 per cent. on 3, 6, 12 and 24 months' deposits respectively.

17th February.—Further reduction in the Treasury Bill rate from $3\frac{1}{4}$ per cent. to $2\frac{3}{4}$ per cent.

23rd February.—A conversion loan was issued in London at 4 per cent., issue price par, maturing 1955-70, to replace £9,621,000 of 4 per cent. stock maturing in July, 1933.

30th May.—Appointment of Commonwealth Grants Commission to inquire into matters relating to grants of financial assistance to the States.

A conversion loan was issued in London at $3\frac{1}{2}$ per cent., issue price £99, maturing in 1937-38, to replace £11,400,000 of $6\frac{1}{2}$ per cent. stock with optional rights of redemption.

31st May.—Lists closed for internal loan of £5,000,000 for State public works, issued at $3\frac{1}{2}$ per cent. at par, maturing in 1942, with subscriptions amounting to £8.4 millions.

1st June.—A further reduction in the Treasury Bill rate from $2\frac{3}{4}$ per cent. to $2\frac{1}{4}$ per cent. was announced.

8th to 14th June.—Premiers' Conference, Melbourne.—By arrangement with the Loan Council, the Commonwealth Bank agreed to finance revenue deficits in 1933-34 by short-term loans to the amount of £8.5 millions, subject to reduction to the extent of any relief obtained by the States from conversion of oversea loans.

30th June.—The Commonwealth Court of Arbitration ordered the restitution of the 10 per cent. reduction in real wages in the Glass Industry; subsequently extending the restitution to the Paper and Pulp, Jam and Fruit Preserving, and certain other industries.

13th July.—A conversion loan was issued in London at 4 per cent., issue price £99, maturing in 1943-48, to replace £17,221,000 of 6 per cent. stock with optional rights of redemption.

14th September.—A conversion loan was issued in London at $3\frac{3}{4}$ per cent., issue price £98, maturing in 1948-53, to replace £20,951,000 of 6 per cent. and $5\frac{1}{4}$ per cent. stock with optional rights of redemption.

4th October.—The Commonwealth Budget provided *inter alia* for substantial remissions of direct and indirect taxation, including further exemptions from Sales Tax and reduction of the rate of tax from 6 to 5 per cent., reduction of special tax on income from property from 10 to 5 per cent., reductions in the income taxation on Life Assurance and other companies, and partial restoration of Financial Emergency reductions in Invalid, Old-age and War Pensions. Public Service salaries and contributions to the Public Service Superannuation Fund. The total relief of taxation was estimated to be at the rate of £7.5 millions annually. At the same time the Government signified its intention of giving effect to that part of the report of the Tariff Board on the protective incidence of primage and exchange which applied to protected goods entitled to admission under the British Preferential Tariff.

16th November.—An internal loan of £10,000,000 was issued at $3\frac{1}{2}$ per cent., issue price £99, maturing in 1943, half for State public works and half for the purpose of retiring Treasury Bills.

30th November.—The price of wool, which had been advancing rapidly for some months, reached nearly 15d. per lb. (greasy merino, standard average). Wheat prices continued to fluctuate at very low levels. Export prices as a whole, in Australian currency, had recovered to 72 per cent. of their 1927-28 level.

4th December.—Flour Tax of £4 5s. per ton imposed to provide portion of revenue necessary to assist necessitous farmers.

5th December.—A conversion loan was issued in London at $3\frac{3}{4}$ per cent., issue price £99, maturing in 1946-49, to replace £10,047,000 of $5\frac{1}{2}$ per cent. and 5 per cent. stock with optional rights of redemption.

The Commonwealth Government provided £3,000,000 for assistance to wheat-growers to be financed partly from a temporary sales tax on flour of £4 5s. a ton, and in part from other sources. The special tax on incomes from property was raised from 5 to 6 per cent. and the customs duty on imported tobacco raised by 6d. a lb.

January, 1934.—During 1933, Unemployment statistics disclosed by Trade Union returns showed steady progressive improvement. Percentage unemployed in December quarter—23 per cent.—lowest level since August, 1930.

2nd January.—Wool realized increased prices at first of 1934 sales. The average prices realized were the highest since September, 1928.

22nd February.—Conversion in London of £21,636,550, $5\frac{1}{2}$ and 5 per cent. loans. New issue $3\frac{1}{2}$ per cent. at £97, maturing 1954-59.

1st April.—Treasury Bill rate reduced from $2\frac{3}{4}$ per cent. to $2\frac{1}{4}$ per cent.

12th April.—Bank deposit rates further reduced to $2\frac{1}{4}$, $2\frac{1}{2}$ and $2\frac{3}{4}$ per cent. for 6, 12 and 24 months respectively.

31st May.—Provisions of 1933 Flour Tax Act ceased to operate.

5th June.—Internal Loan of £12,234,000, $3\frac{1}{4}$ per cent. at £08 10s., repayable at par in fourteen years, raised for Commonwealth and State public works and funding of Treasury Bills. The terms of this flotation were the lowest ever offered for a Commonwealth loan.

19th June.—Commonwealth Bank Board agreed to finance Revenue Deficits for 1934-35 to a limit of £5,880,000, subject to the funding of an equivalent amount of Treasury Bills during the year. This amount was subject to reduction by any additional special grants from the Commonwealth over the 1933-34 basis.

25th June.—The Commonwealth Bank Board announced its withdrawal of the guarantee of payment and the undertaking that treasury bills would be rediscounted before maturity at the fixed rate in regard to new issues and re-issues after 30th June. Rediscounting will still be possible but at the rate fixed by the Commonwealth Bank at the time of the transaction.

24th July.—Commonwealth Budget for 1934-35 provided *inter alia* for further remissions in indirect taxation including additional exemptions from Sales Tax and reductions in primage, concessions in wireless licence fees and telephone charges; further restoration in part of public service salaries; more liberal war pensions, repatriation, old-age and invalid pensions, and maternity allowance benefits; assistance to primary producers in the form of a fertilizer subsidy; assistance to fruit-growers and other primary producers; and a special non-recurring grant of £2,000,000 to the States.

5th August.—Bank deposit rates for three months terms reduced from 2 per cent. to $1\frac{1}{2}$ per cent.

11th October.—Further reduction in Bank deposit rates of one-quarter of 1 per cent. to 2, $2\frac{1}{4}$ and $2\frac{1}{2}$ per cent. respectively for 6, 12 and 24 months' terms.

15th October.—Treasury Bill rate reduced from $2\frac{1}{4}$ to 2 per cent.

8th November.—Conversion loan of £14,601,806 issued in London at £99, maturing in 1964-74, interest at $3\frac{1}{4}$ per cent.

20th November.—An internal loan of £15,000,000 raised for Public Works and funding of Treasury Bills issued at 3 per cent. at £99 15s., maturing in fourteen years.

8th December.—Commonwealth 5 per cent. stocks in New York reached par.

13th December.—Flour tax re-imposed. Rate of tax £2 12s. 6d. per ton.

17th December.—Further reduction of Bank Deposit rates—three and six months terms reduced to 1 and $1\frac{1}{2}$ per cent. respectively. Treasury Bill rate on new issues and re-issues to be reduced to $1\frac{1}{4}$ per cent. from 1st January, 1935.

January, 1935.—Evidence of improved financial conditions was given in the increase in bank clearings and the decrease in unemployment during 1934. The total of bank clearings (including Treasury Bills) amounted to £2,095,000,000, and was 8.4 per cent. higher than the corresponding figure for 1933. Unemployment statistics disclosed by the Trade Union returns continued to show progressive improvement. Percentage unemployed in December quarter, 18.8 per cent., lowest level since May, 1930.

7th January.—Flour Tax commenced to operate. Rate of tax, £2 12s. 6d. per ton.

18th January.—Conversion loan of £22,384,000 issued in London at par, interest at $3\frac{1}{4}$ per cent., repayable 1956-61. Largest single conversion operation.

2nd February.—Commonwealth Government announced £12,000,000 grant to States over three years for the purpose of adjusting farmers' debts by means of composition arrangements.

6th March.—The price of gold in Australian currency reached the new high level of £9 4s. 4d. per fine ounce.

13th March.—The Wheat Commission reported that production should be adjusted to find a new economic equilibrium at the existing world parity, as no permanent rise in price could logically be expected. The Commission further recommended that the wheat industry should be assisted through the application of a home consumption price, that a Commonwealth Board should be appointed to supervise overseas sales, and that a plan of debt adjustment should be undertaken over a period of seven years.

30th March.—New tariff schedule announced. Reduction in duties on apparel and stockings, farm and engineering machinery, and certain classes of motor body panels made in Great Britain.

20th May.—The Commonwealth Bank Board agreed to finance Revenue Deficits in 1935-36 to the limit of £4,730,000, subject to the funding of an equivalent amount of Treasury Bills during the year.

11th June.—Internal loan of £12,500,000, 3½ per cent. at £99 10s. repayable at par in 1949. Raised for Commonwealth and State public works and funding of Treasury Bills.

30th June.—Public Debt of Commonwealth and States (including short-term debt) totalled £1,242,115,000—Commonwealth, £394,151,000, and States, £847,964,000. Net increase in 1934-35, £19,556,000, or 1.6 per cent.

24th July.—Conversion loan of £13,470,000 issued in London at 3 per cent. at par, repayable 1939-41. Annual saving in interest and exchange of £26,000 per annum.

23rd September.—Commonwealth Budget for 1935-36 provided *inter alia* for reduction from 6 per cent. to 5 per cent. of super tax on property income; extension of the list of commodities exempted from Sales Tax; some remission of primage duty and a reduction in excise on tobacco of local origin; further restoration in part of public service salaries; extension of eligibility for war pensions and repatriation benefits; some expansion of the Defence programme; a contribution to interest and sinking fund payments on Municipal loans; and the provision of a bounty on oranges exported during the 1935 season.

24th September.—Report of Commonwealth Grants Commission recommended increased special grants for 1935-36, viz., South Australia, £1,500,000; Western Australia, £800,000; Tasmania, £450,000.

4th to 7th October.—Conference of Federal and State Ministers and Experts on the Wheat Industry. The conference approved in theory the application of a home consumption price for wheat, the scheme to be superintended by the Commonwealth.

15th November.—Commonwealth Government appointed Royal Commission to inquire into and report upon the banking and monetary systems of the Commonwealth.

26th November.—Internal loan of £7,500,000, 3½ per cent. at £99 15s., repayable at par in 1949, raised for Commonwealth and State public works and the funding of Treasury Bills. The optional privilege of tendering the Bonds at their par value for Commonwealth Probate purposes was withdrawn.

5th December.—An Act was passed to continue the operation of the Flour Tax in 1936 to contribute towards a bounty on the 1935-36 harvest.

31st December.—Trade Union unemployment percentage showed further reduction to 13.7 per cent. for fourth quarter.

7th January, 1936.—Conversion Loan in London of £21,657,000. New South Wales 5 per cent. stocks converted to 3 per cent., issued at £95 10s., maturing 1955-58.

17th January.—Internal conversion loan £2,303,000, Queensland £5 0s. 9d. per cent., converted to 3½ per cent. at par.

28th February.—Commonwealth Bank announced a public issue of £1,000,000 Treasury Bills at a discount rate of 1½ per cent. The issue was unsuccessful, only £315,000 being subscribed.

2nd March.—Bank of New South Wales increased interest rates on fixed deposits to 2 per cent. for three months, 2½ per cent. for six months, 2¾ per cent. for twelve months, and 3 per cent. for twenty-four months. Bank of Adelaide made similar increases on the following day.

24th March.—Commonwealth Bank and the other Trading Banks increased rates on fixed deposits to conform to the rates offered by the Bank of New South Wales from 2nd March.

2nd June.—Internal loan of £0,000,000, 3½ per cent., issued at £98 10s., repayable 1951-52, undersubscribed by £1,800,000.

8th June.—Conversion loan in London of £16,551,000, at 2¾ per cent., issued at £99, repayable 1941-43. The stocks converted were 3 per cent. Western Australian, 3½ per cent. Commonwealth and South Australian, and 4½ per cent. New South Wales and Western Australian. The loan was over subscribed.

25th June.—Import restrictions placed by the Government of Japan on imports from Australia, on the grounds that Australia had applied "unreasonable restrictive measures in respect of the importation of goods produced or manufactured in Japan".

4th August.—Excess of exports over imports for year 1935-36 was £ stg. 22,597,000.

Wheat prices rose to a new six-year peak of 5s. per bushel for city parcels in Melbourne.

10th September.—Commonwealth Budget for 1936-37 introduced, providing for taxation remissions equal to £5,275,000 in a full year (£3,808,000 for remainder of current year); increased grants on account of Federal Aid Roads; restoration of public service salaries; increases in certain classes of war pensions; increased old-age and invalid pension rates, and liberalized conditions for maternity allowances. A surplus of £45,000 was anticipated for the year 1936-37.

11th September.—Commonwealth Grants Commission recommended the following grants for 1936-37: South Australia £1,330,000, Western Australia £500,000, and Tasmania £600,000. Sales Tax reduced from 5 per cent. to 4 per cent. and further exemptions granted.

18th September.—Further exemptions from primage duties promulgated.

28th September.—Price of gold rose by about 3s. to £A8 13s. 9d. per fine ounce.

26th September.—Remissions of sales tax, estimated at £1 million, on wide range of goods.

7th November.—Australian Loan Council decided to grant extra £1 million to Western Australia because of drought conditions in that State; loan programme for year increased by £750,000 to £22,450,000.

26th November.—Internal loan of £7,500,000, $3\frac{3}{4}$ per cent., at £97 $\frac{1}{2}$, maturing on 5th November, 1951.

27th December.—Settlement of trade dispute with Japan.

3rd January, 1937.—Japan resumed buying at Sydney wool sales; prices advanced from 10 to 15 per cent.

13th January.—The percentage of unemployment amongst trade unionists declined to 10.7 in the last quarter of 1936.

28th January.—Life assurance sold during 1936 was a record for Australia.

6th April.—Wheat prices for city parcels touched 6s. a bushel in Melbourne.

27th April.—Internal loan of £7,500,000, $3\frac{7}{8}$ per cent., at £99 $\frac{1}{4}$, maturing on 15th October, 1948.

10th May.—Export quota of 400,000 tons allotted to Australia under International Sugar Agreement.

9th June.—Conversion loan in London. £12,360,958 New South Wales stocks converted to $3\frac{1}{2}$ per cent., issued at £96 $\frac{1}{2}$, maturing in 1950-52.

23rd June.—Commonwealth Arbitration Court increased the Federal basic wage by an average of 5s. for males and 2s. 6d. for females.

30th June.—Deposits in the trading banks reached record total of £320,510,000 in the quarter ended June, 1937. Increase for the year was £22,460,000. Savings bank deposits were also a record at £230,851,000.

3rd August.—Australia's favourable balance for 1936-37 was £Stg. 35,470,000 compared with £stg. 22,376,000 in 1935-36 and £stg. 15,583,000 in 1934-35.

24th August.—Presentation of Report of the Royal Commission on Banking (see summary of recommendations on p. 979).

Fourth Report of the Commonwealth Grants Commission recommended the following State grants: South Australia, £1,200,000; Western Australia, £575,000; Tasmania, £575,000.

27th August.—Commonwealth Budget presented. Provision of £11,531,000 for defence. Invalid and old-age pensions raised from 19s. to £1. No taxation reductions. Estimated surplus, £30,000.

4. **Effects on Government Finance.**—The aggregate deficit for the year 1930-31 was £25,370,000, consisting of £10,760,000 for the Commonwealth and £14,610,000 (New South Wales, £7,850,000) for the States. For the year 1931-32 the original estimate was £41,080,000 divided almost equally between the Commonwealth and the States; this figure was subsequently reduced to £12,660,000 as a result of the conference proposals and later revisions. The actual deficits realized for 1931-32 and following years may be seen from the table below :—

DEFICITS.—COMMONWEALTH AND STATES, 1931-32 to 1937-38. (£'000.)

States, etc.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37. (a)	1937-38. (d)
New South Wales (b)	(r) 14,228	3,758	3,208	2,299	1,691	(-) 135	(-) 9
Victoria ..	1,608	842	769	151	116	(-) 21	(-) 12
Queensland ..	2,075	1,554	1,129	565	742	(-) 280	(-) 330
South Australia ..	1,063	1,009	844	36	149	(+) 139	(+) 4
Western Australia ..	1,558	864	789	167	88	(-) 371	(-) 120
Tasmania ..	272	55	48	119	130	(-) 45	(-) 5
Six States ..	20,804	8,082	6,787	3,265	2,445	(-) 311	(-) 431
Commonwealth ..	(+) 1,314	(+) 3,547	(+) 1,302	711	(-) 3,568	(-) 1,277	(-) 30
Grand Total ..	19,490	4,535	5,485	2,554	(+) 1,123	(-) 966	(-) 401

(a) Preliminary figures. (b) Exclusive of Metropolitan Board of Water Supply and Sewerage.
(c) Excludes surplus of £890,000 Main Roads Board, and includes £1,673,000 Interest and Exchange properly attributable to 1930-31. (d) Estimated deficit.

5. **The Adopted Plan.**—The full text of the Report prepared by the representatives of the various Australian Governments in connexion with the national financial position is as follows :

CONFERENCE REPORT.

“The Governments of Australia have met in Conference to consider what measures are possible to restore solvency and avoid default. The national income was £650,000,000 in 1927-28. It fell to £564,000,000 in 1929-30, and a further fall to £450,000,000 in 1931-32 is estimated.

“This has reacted on Government finance.

“The total deficit of the seven Australian Governments will be £31,000,000 for the present financial year. The Governments are now going behind at the rate of £40,000,000 a year, in spite of reduction of expenditure amounting to £11,000,000 per annum since 1929-30. The deficits have been met hitherto by bank overdraft. The Commonwealth Bank has notified the Governments that the limit to that process has been reached. Early in July, Governments will have insufficient means to meet their obligations. Unless the drift be stopped, Public Service salaries and wages, pensions and interest could not be paid in full. Public default would be followed by a partial breakdown in public utilities such as railways, and in private industry and trade. Revenue would come topping down, and even half-payment might become impossible. With this prospect, everything that can be got from Government economy, from taxation and from reduction of interest, must be called on to bring the debit balance within manageable limits that can safely and practicably be covered for a time by borrowing.

THE PLAN.

“The Conference has, therefore, adopted a plan which combines all possible remedies in such a way that the burden falls as equally as possible on every one, and no considerable section of the people is left in a privileged position. This sharing of the burden is necessary to make the load more tolerable; it is still more necessary, because only on this condition will it be possible to get the combined effort required.

"The plan has been adopted by the Conference as a whole, each part of which is accepted on the understanding that all the other parts are equally and simultaneously put into operation. It embraces the following measures :—

- (a) A reduction of 20 per cent. in all adjustable Government expenditure, as compared with the year ending 30th June, 1930, including all emoluments, wages, salaries and pensions paid by the Governments, whether fixed by statute or otherwise, such reduction to be equitably effected ;
- (b) Conversion of the internal debts of the Governments on the basis of a 22½ per cent. reduction of interest ;
- (c) The securing of additional revenue by taxation, both Commonwealth and State ;
- (d) A reduction of bank and Savings Bank rates of interest on deposits and advances ;
- (e) Relief in respect of private mortgages.

"These proposals require the greatest effort in economy and taxation which the Conference considers it safe to attempt. The effect will be still to have a gap of from £13,000,000 to £15,000,000 to be covered for a time by borrowing.

REDUCTION OF EXPENDITURE.

"The plan provides for Government economy on the basis of an immediate cut, averaging 20 per cent., for all Government wages and salaries below the level of 1929-30. To this will be added all saving that can be made from a strict scrutiny into the necessity of every item of Government expenditure.

"The same general principle is extended to all pensions provided out of Government funds—old-age and invalid pensions, war pensions, superannuation pensions and the maternity allowance. Over the whole field of this expenditure, the cut will amount to 16 per cent. The result will be, for each Government, savings as shown in the following table :—

FURTHER REDUCTIONS IN EXPENDITURE BEYOND THOSE PROVIDED FOR IN THE PRESENT ESTIMATES FOR 1931-32.—ADMINISTRATION AND PENSIONS.

					£
Commonwealth	..	..	..	..	6,050,000
New South Wales	..	..	..	..	3,300,000
Victoria	..	..	..	..	880,000
Queensland	..	..	..	..	620,000
South Australia	..	..	..	..	400,000
Western Australia	..	..	..	..	560,000
Tasmania	..	..	..	..	110,000
					11,920,000

"The further savings to be made in accordance with the plan are, therefore, £11.92 millions for all Governments. The total reduction of expenditure (excluding Commonwealth pensions) compared with 1929-30 will be £21.4 millions.

TAXATION.

"Taxation equally must make a maximum contribution. Ordinary direct taxation has nearly reached the limit in some States. The Commonwealth will raise an additional £1.5 millions by income tax, and what capacity for direct taxation remains will be left for a last reserve as the option of the several State Governments. The only possible substantial contribution must, therefore, be by taxes on consumption so designed as to add as little as possible to the costs of industry. It has been agreed that the sales

tax and primage should be increased to give £6.4 millions of additional revenue. By the agreed economies and taxation, the position estimated for 1931-32 will be improved by £20,000,000, exclusive of savings on interest and additional State taxation.

REDUCTION OF INTEREST.

"The reduction in the rate of interest is of urgent importance, for two reasons :—

1. With the fall in prices since 1929, interest payments have become an intolerable load on all industry, and immediate relief is necessary for the restoration of industry and employment. Government budgets are subject to the same strain, because revenue falls with falling prices, and thus interest relatively becomes a heavier burden. A reduction of interest will substantially reduce the deficit which remains when economy and taxation have made their maximum contribution.

2. Income from interest, particularly from Government bonds and bank interest, has hitherto suffered little loss. A reduction of interest will ensure that it will contribute equitably to the common effort to restore solvency. Unless the contribution is made, it is not to be expected that the wage-earner and the pensioner will acquiesce in the very real hardships imposed on them by this plan.

"The second of these objects could be obtained by taxation, but taxation would give no relief to industry and no stimulus to employment. The Conference has, therefore, resolved on an appeal to all bond-holders to accept a reduction of $22\frac{1}{2}$ per cent. in the effective rate of interest. This is to be done by a conversion loan, and the new securities will be exempt from the present super-tax of $7\frac{1}{2}$ per cent. and from any additional taxation imposed on income from interest, in order to spread as evenly as possible the sacrifices required to restore solvency.

"Concurrently with the reduction of bond interest must go a reduction in private interest. This is mainly a matter for the banks, who are co-operating to that end. Reductions of interest are being arranged between the Commonwealth Bank, the trading banks, and the Savings Banks which will result in the rapid reduction in the interest on money required for trade and industry. This reduction of interest will be supplemented by legislation giving relief to mortgagors. This legislation forms part of the plan.

"The lower rates of interest will greatly stimulate the general demand for credit, and the conference has the assurance of the Commonwealth Bank and the trading banks that, as a result of the operation of the plan, money will be readily available. With falling costs and ample supplies of credit, industry should then recover. This recovery will be stimulated by the maintenance of a free external exchange rate and the avoidance of any measures that will cause a sudden further fall in prices. A reduction of existing exchange rates will best be achieved on rising markets for Australian exports. If premature attempts are made to force the rates down earlier, they may bring about a further crisis by reducing export values once more.

SUMMARY.

"The total effects of the plan on the budgets of 1931-32 may now be summarized. The total deficit as estimated for 1931-32 was £40,000,000. The extra economies agreed upon take £12,000,000 off this total. New Federal taxation embodied in the plan will contribute a net £7.5 millions, in addition to any increases which may be obtained by the States. The saving of interest by conversion will reduce the internal interest burden by £6.5 millions. As Governments will pass on this relief to their own borrowers—public bodies, public utilities, and private individuals—the net benefit to the budgets will be £5.5 millions. The combined effect will be a reduction of the deficit from £40,000,000 to £15,000,000. A further reduction of the deficit by £2,000,000 could be secured by levelling up the income tax in at least two States.

"These very substantial reductions will go far to restore confidence both at home and abroad. This restoration of confidence, with the indirect effects of the fall in interest, may be expected to restore revenue, even to some extent in 1931-32, and substantially in the years following. A rise in world's price for our exports would accelerate the

upward movement, and this rise may reasonably be expected within the next two years. With any improvement in industry, the expenditure on unemployment sustenance will decline, with further relief to budgets.

"With this prospect, and confidence restored, there would be no difficulty in borrowing temporarily to meet the deficits as substantially reduced.

"The deficit includes £10.6 millions additional charge on overseas interest and external payments on account of exchange. If the exchange rate falls, there will be a corresponding decline in the deficit. On the other hand, if the present exchange rate is maintained, its full effect in keeping up local prices and incomes will have a beneficial effect on Government revenues.

A UNITED EFFORT.

"Before the details of the plan were settled, and in order to make it effective, the Leaders of the Opposition in the Commonwealth Parliament were invited to attend the Conference. After full discussion of the whole plan, the following resolution was passed:—

The Conference, including the Leaders of the Opposition in the Federal Parliament, having most carefully considered the financial position of the Commonwealth and the States, and recognizing the national inability to meet existing Government charges, is unanimously of the opinion that to prevent national default in the immediate future, and a general failure to meet Government payments, all expenditure, including interest on Government securities and other interest, and expenditure upon governmental salaries and wages, pensions, and other social services must be substantially reduced.

These measures, drastic as they may appear, are the first essentials to the restoration of prosperity and the re-employment of our workless people.

The necessary sacrifice is due to national inability to pay, and it must, therefore, be shared by all.

The Conference has accordingly provided a conversion plan under which bond-holders may make their contribution to the general sacrifice by themselves accepting the lower rate of interest which the existing position makes unavoidable.

The Conference therefore appeals to all sections of the people to recognize the position, and, in the interests of the nation, to accept the sacrifices which are involved.

A National Appeal Executive, consisting of the Prime Minister, the Leader of the Opposition, and the Chairman of the Commonwealth Bank Board, is appointed by this Conference to direct the conversion campaign.

CONCLUSION.

"1. The plan agreed upon is an indivisible whole and the carrying out of any one part is dependent upon the carrying out of all parts.

"2. It involves sacrifices by every member of the community, and the Conference appeals to all sections of the people to recognize the position, and to accept these sacrifices as a national duty.

"3. To the bond-holder the plan involves a reduction of interest by $22\frac{1}{2}$ per cent., but it safeguards the capital of the investor.

"4. To the Government employee the plan involves a reduction, which with reductions already effected represents an average of 20 per cent., but it makes his position, and future emoluments, much more secure.

"5. To the war pensioner, the plan involves a reduction of 20 per cent. (in some cases less), but it removes the danger of any sudden stoppage, and provides security for future payments.

"6. To the invalid and old-age pensioner the plan involves a reduction in most cases of $12\frac{1}{2}$ per cent., but it removes the danger of any sudden stoppage, and provides security for future payments.

"7. To all of these a large part of the reduction is counterbalanced by the fall in prices, and in the cost of living.

"8. To the unemployed, the plan provides for a restoration of employment, and in the meantime makes more secure the continuation of sustenance relief.

"9. With the sacrifice distributed over the whole community in this manner, with the lead of Governments followed by all citizens, with the revival of business confidence and activity, a sure foundation will have been laid for the restoration of general prosperity in Australia.

EFFECT OF THE PLAN ON DEFICITS.

States, etc.	1929-30 Actual.	1930-31 Estimate.	1931-32	
			Original Estimate.	After making the Agreed Adjustments.
	£ millions.	£ millions.	£ millions.	£ millions.
Commonwealth ..	1.50	13.40	20.40	4.38
New South Wales ..	5.57	10.48	11.51	5.41
Victoria ..	1.17	2.60	3.06	1.31
Queensland ..	.72	.74	1.63	.76
South Australia ..	1.63	2.20	2.40	1.50
Western Australia ..	.52	1.52	1.86	1.20
Tasmania ..	.02	.21	.22	.09
Total States ..	9.63	17.75	20.68	10.27
Total ..	11.13	31.15	41.08	14.65*

* Further adjustments reduced this amount to £12.66 millions.

FINAL RESOLUTION.

Just prior to concluding its business, the Conference unanimously passed the following resolution, on the motion of Mr. Hill (Premier of South Australia):—

The representatives of each Government present at this Conference bind themselves to give effect promptly to the whole of the resolutions agreed to at this Conference."

C.—STATE FINANCE.

STATE FINANCE, 1936-37.

State.	Revenue.		Expenditure.		Net Loan Expenditure.(a)	
	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.
	£'000.	£ s. d.	£'000.	£ s. d.	£'000.	£ s. d.
New South Wales	49,959	18 12 9	49,885	18 12 2	6,336	2 7 3
Victoria ..	27,221	14 13 11	27,192	14 13 7	2,617	1 8 3
Queensland ..	16,535	16 16 0	16,815	17 1 9	2,574	2 12 4
South Australia ..	11,739	19 19 1	11,600	19 14 4	1,245	2 2 4
Western Australia	10,185	22 10 10	10,557	23 7 3	2,032	4 9 11
Tasmania ..	3,489	15 0 10	3,444	14 16 11	815	3 10 3
Total ..	119,128	17 10 11	119,493	17 12 0	15,619	2 6 0

(a) On Works and Services, excludes Discounts and Flotation expenses and deficits.

COMMONWEALTH MINISTRY.

The Commonwealth Ministry was reconstituted as from 30th November, 1937, as follows :—

Prime Minister	.. .. .	The Rt. Hon. Joseph Aloysius Lyons, C.H.
Minister for Commerce and Minister for Health	.. .. .	The Rt. Hon. Earle Christmas Grafton Page.
Attorney-General and Minister for Industry	.. .. .	The Rt. Hon. Robert Gordon Menzies, K.C.
Minister for External Affairs, Minister in Charge of Territories and Vice-President of the Executive Council	.. .. .	The Rt. Hon. William Morris Hughes, K.C.
Postmaster-General	.. .. .	Senator The Hon. Alexander John McLachlan.
Minister for Trade and Customs	.. .. .	The Hon. Thomas Walter White, D.F.C., V.D.
Treasurer and Minister in Charge of Development and Scientific and Industrial Research	.. .. .	The Hon. Richard Gardiner Casey, D.S.O., M.C.
Minister for Defence	.. .. .	The Hon. Harold Victor Campbell Thorby.
Minister for the Interior	.. .. .	The Hon. John McEwen.
Minister for Repatriation and Minister in Charge of War Service Homes	.. .. .	Senator The Hon. Hattil Spencer Foll.
Minister without Portfolio assisting the Minister for Trade and Customs, and representing the Postmaster-General in the House of Representatives	.. .. .	The Hon. John Arthur Perkins.
Minister without Portfolio assisting the Minister for Commerce	.. .. .	Senator The Hon. Allan Nicoll MacDonald.
Minister without Portfolio assisting the Treasurer and representing the Minister for Repatriation in the House of Representatives	.. .. .	The Hon. Victor Charles Thompson.
Minister without Portfolio assisting the Minister for Commerce	.. .. .	The Hon. Archie Galbraith Cameron.

GENERAL INDEX.*

Note.—This index is followed by a list of maps, graphs and diagrams, also a list of special articles, etc., in previous issues of the Official Year Book. Area, population, etc., of particular localities are indexed under the locality concerned. Where the subject matter extends continuously over more than one page the first page only is indexed.

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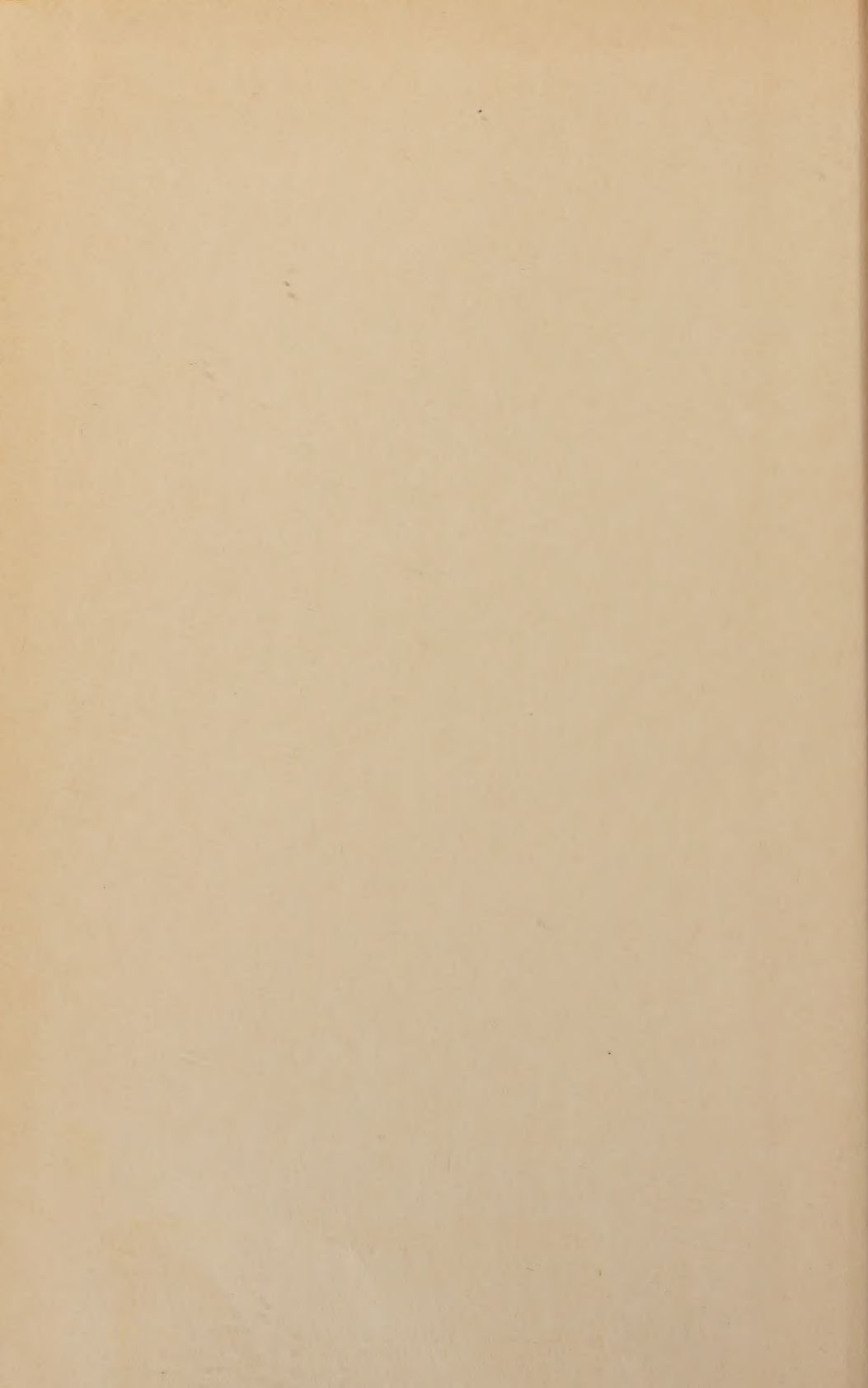
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